

**tyco**

*Fire &  
Security*

## C•CURE Product Catalogue - *Issue 2*



*a vital part of your world*

# Introduction

This is the Second Edition of Tyco Safety Products' C•CURE Catalogue for product available from our European Distribution Centres. We aim to make your product range as comprehensive as possible to ensure you never need go anywhere else.



To meet this goal, our product specialists, with your help, have selected the most appropriate, cost effective product range. Please note that not all of the C•CURE Product range is stock coded/held. In line with our ISO 9000 accreditation, only those products that meet the highest quality criteria have been included. We have also included certain parts that are available from Software House but not held in the Europe.

Our warehouse is one of the largest Fire & Security distribution centres in Europe, situated in the south of the Netherlands with easy access to international harbours and airports. Due to the central position of our warehouse in western Europe, in a circle of 5 kilometers there's access to 3 different countries, we can easily deliver within 24 hours the requested products. Further, we have the UK warehouse in Letchworth and two satellite distribution centres in Lyon and Barcelona.

## TECHNICAL SUPPORT CALL CENTRE



### WHO ARE WE?

TSP European Technical Support Centre live since September 6th 2004

- Centralised European Technical Support Call Environment
- Supporting Europe-Middle East-Africa
- Post Sales Product and Technical Support
- Call Logging and Monitoring
- Product Issue Management and Escalation
- Fly and Fix where and when necessary

### WHAT DO WE DO?

First Line support for TSP Products:

- **Intruder:** DSC and Bentel
- **EAS:** Sensormatic
- **CCTV:** American Dynamics
- **Access:** Software House, Kantech & CEM
- **Fire Detection:** Call Routing
- **Fire Suppression:** Call Routing

English – German – Italian – Spanish – French – Dutch

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8:00 to 18:00 GMT

7:00 to 17:00 EET

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## Who is Software House?

- Number One Access Control Brand Name
- Software House was founded in 1973
- C•CURE 800/8000 (W2000/XP) the flagship platform
- Over 10,000 systems sold: 120,000 doors annually
- Over 6,000 customers many with multiple systems
- Two software enhancement releases per year
- Based in Lexington, Boston
- 150 Employees, 70+ Engineers

## What is C•CURE 800/8000?

C•CURE 800/8000 is a scalable security management solution suitable for large and small installations alike. With its open architecture, it seamlessly integrates numerous applications.

C•CURE 800 is an industry leading security management solution defined by success in five major categories:

- Strong Database Features
- Ease of Administration
- Completely User Friendly
- Advanced Alarm and Event Monitoring capabilities
- Third Party Product Integration

## Why use Software House Solution?

C•CURE 800/8000 An integrated security solution developed by a single manufacturer and delivered through the most highly trained and qualified integrators in the industry enabling:

- Highest Stability
- Robust Integration
- Physical Access Control, Video Surveillance, Digital Video Recording, Intrusion Detection, Visitor Management, ID Badging, Traffic Flow Monitoring/Counting
- Most highly trained Integrators
- Excellent Training program
- Voice of the Customer Insuring Lowest Total Cost of Ownership



*\* as named in the Freeman Reports*

## Core Software



### Features

- Event and Alarm Monitoring
- Database Partitioning
- CCTV Integration
- Local and Cross Cluster Anti-passback with iSTAR Pro
- Enhanced Monitoring Station with Split Screen Views
- Alternate and Extended Shunt by Door
- Escort Management
- Single Subscriber Email and Paging
- Enhanced IT-based Password Protection
- N-man Rule and Occupancy Restrictions
- Open Journal Data Format for Enhanced Reporting\*
- Automated Personnel Import

C•CURE 800

### Core Software

C•CURE 800 is a PC based Access Control and Security Management System which is scalable to meet all of your security needs.

The core software provides access control and alarm input and output management.

### C•CURE® 800/8000 Integrated Security Management System

#### C•CURE 800

C•CURE 800 is a scalable, single platform security management solution that enables seamless integration of various technologies including RFID Asset Tracking, Digital and CCTV Monitoring, Paging, and Photo Imaging management. C•CURE 800 utilises the MS Windows 2003/XP 32-bit operating system, which allows for running multiple applications simultaneously, and sharing information with other systems over an enterprise-wide network.

C•CURE 800 utilises a MS Windows Graphical User Interface (GUI) allowing intuitive navigation among interactive application modules.

The MS Windows operating system provides numerous performance advantages such as use of industry standard computer hardware and communications devices, true real time multi-user, multi-tasking operating system designed to run multiple applications simultaneously without compromising the security monitoring environment, open platform with full connectivity to standard network topologies and a highly security operating environment.

At the core of the C•CURE 800 is a powerful, 4GL relational database engine providing maximum flexibility in data storage, manipulation, and retrieval. This makes the C•CURE 800 a powerful security information management tool.

#### C•CURE 8000

C•CURE 8000 represents a major extension to the C•CURE 800 platform by introducing the next generation in a scalable, security management solution for large installations. It seamlessly integrates numerous applications including access control and alarm monitoring, email, embedded broadcast paging, RFID asset tracking, Digital and CCTV, elevator control and photo imaging.

The C•CURE 800 platform provides inter-operability with third party applications and systems through open database connectivity (ODBC) links, the optional Bi-directional Serial Interface, and licensed application programming interface (API). C•CURE 8000's Graphical User Interface (GUI) allows intuitive navigation among interactive application modules.

#### Additional Benefits

- ODBC Support
- Windows® 2000 Professional, Windows Server 2003, Windows
- XP Professional for Servers
- Field-Level Audit Trail
- Cardholder Access Events
- Muster/De-muster
- Multiple cards per cardholder record – including PIN-only
- Support for up to 128 card formats
- HID Corporate 1000 format
- Automatic Backup Service

## Configuration Matrix

	Model 1	Model 5	Model 10	Model 20	Model 30	Model 40	8000 Enterprise Server	8000Plus Enterprise Server
# of Online Readers	32	64	128	256	512	1000	2500	*
# of Online Inputs	128	256	512	1024	2500	5000	10000	*
# of Online Outputs	128	256	512	1024	2500	5000	10000	*
# of addressable controllers (dial-up or network)	No limit*	No limit*	No limit*	No limit*	No limit*	No limit*	No limit*	No limit*
# of Cardholders	10K	40K	40K	250K	250K	250K	500K	500K
# of Assets	10K	40K	40K	250K	250K	250K	500K	500K
# of Simultaneous Client PC's	2	3	4	8	16	64	128	128
# of Client PCs definable on server	999	999	999	999	999	999	999	999
C-CURE ID Badging Client	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Unlimited Paging recipients	Optional	Optional	Optional	Optional	Optional	Optional	YES	YES
iSTAR Intrusion Zones/Keypad	Optional	YES	YES	YES	YES	YES	YES	YES
<b>Commands</b>								
Guard Tour	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Central Monitoring	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bi-Directional Serial interface with SimplexGrinnel 4100U fire panel	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bi-Directional Serial interface with Stentofon Intercom	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bi-Directional Serial interface with Radionics Receivers	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bi-Directional Serial interface with Invonics	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bi-directional Serial Interface	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
C•CURE NetVue software with enhanced Alarm Management	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Asset management software	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
C-CURE Central replication option	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Enhanced Reporting	Optional	YES	YES	YES	YES	YES	YES	YES
Area Lockout	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Advanced Door Monitoring	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Carpool anti-passback	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Support for Multiple Multiple Cards	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PIN-only access	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Presets and patterns with C.CURE NetVue Option(with Intellex)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Customised Alarm Priorities and Sorting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dual Acknowledgement Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

The following features are standard on all Models of C-CURE 800: Unlimited E-Mail Recipients, Paging-Single Subscriber (included with the server), N-Man Rule and Occupancy Restrictions, Wild Card in Search, Expiring Clearance, Enhanced Password Protection, Field Level Audit of Personnel Data, Muster/De-Muster, and Cardholder Access Events. A sentinel is required to operate all levels of the C-CURE 800/800 systems. On all bundled systems C-CURE 800 Models 1, 5, 10 and 20 MS Windows XP Professional is supplied. On Models 30 and above MS Windows 2003 Server is supplied. Redundant systems are shipped with MS Windows 2003 Server only. \*C-CURE 800/8000 is designed for unlimited expansion. The often-stated 3,000 readers and 32,000 input/output handling are tested limits only and do not represent expansion restrictions. System performance will vary depending upon specific hardware configuration including number of communication lines/ports, download/upload frequency, etc. Be aware that the number of inputs/outputs handling on Bi-Directional interface are also calculated on the input/output limits.

## C•CURE 800/8000 Software Versions Available

Language	Latest Version
French, German, Spanish, Dutch	8.2.4 (9.0.4 Summer '06)
English	9.0
Czech	7.0.5
Polish	8.2.5

**IMPORTANT NOTE:**

Software House will offer the latest software plus two revisions back for sale. It is important to note that technical support is only available for the latest release plus one revision back. One set of English manuals is provided with each application.

## C•CURE 800 Basic Software Product Codes

<b>Product Codes</b>	
<b>English</b>	
CC800-1S-NV-EN	C•CURE 800 Model 1 System Software only - ENGLISH without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-EN	C•CURE 800 Model 1 System Software Only , ENGLISH Includes server software and 2 C•CURE C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-EN	C•CURE 800 Model 5 System Software Only - ENGLISH includes server software and 3 C•CURE Client licenses
CC800-10S-EN	C•CURE 800 Model 10 System Software Only - ENGLISH includes server software and 3 C•CURE Client licenses
CC800-20S-EN	C•CURE 800 Model 20 System Software Only - ENGLISH includes server software and 8 C•CURE Client licenses
CC800-30S-EN	C•CURE 800 Model 30 System Software Only - ENGLISH includes server software and 16 C•CURE Client licenses
CC800-40S-EN	C•CURE 800 Model 40 System Software Only - ENGLISH includes server software and 64 C•CURE Client licenses
<b>French</b>	
CC800-1S-NV-FR	C•CURE 800 Model 1 System Software only - FRENCH- without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-FR	C•CURE 800 Model 1 System Software Only , FRENCH includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-FR	C•CURE 800 Model 5 System Software Only - FRENCH includes server software and 3 C•CURE Client licenses
CC800-10S-FR	C•CURE 800 Model 10 System Software Only - FRENCH includes server software and 3 C•CURE Client licenses
CC800-20S-FR	C•CURE 800 Model 20 System Software Only - FRENCH includes server software and 8 C•CURE Client licenses
CC800-30S-FR	C•CURE 800 Model 30 System Software Only - FRENCH includes server software and 16 C•CURE Client licenses
CC800-40S-FR	C•CURE 800 Model 40 System Software Only - FRENCH includes server software and 64 C•CURE Client licenses
<b>Spanish</b>	
CC800-1S-NV-SP	C•CURE 800 Model 1 System Software only - Spanish- without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-SP	C•CURE 800 Model 1 System Software Only , Spanish, includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-SP	C•CURE 800 Model 5 System Software Only - Spanish includes server software and 3 C•CURE Client licenses
CC800-10S-SP	C•CURE 800 Model 10 System Software Only - Spanish includes server software and 3 C•CURE Client licenses
CC800-20S-SP	C•CURE 800 Model 20 System Software Only - Spanish includes server software and 8 C•CURE Client licenses
CC800-30S-SP	C•CURE 800 Model 30 System Software Only - Spanish includes server software and 16 C•CURE Client licenses
CC800-40S-SP	C•CURE 800 Model 40 System Software Only - Spanish includes server software and 64 C•CURE Client licenses

## German

CC800-1S-NV-GR	C•CURE 800 Model 1 System Software only - German- without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-GR	C•CURE 800 Model 1 System Software Only ,German, includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-GR	C•CURE 800 Model 5 System Software Only -German includes server software and 3 C•CURE Client licenses
CC800-10S-GR	C•CURE 800 Model 10 System Software Only - German includes server software and 3 C•CURE Client licenses
CC800-20S-GR	C•CURE 800 Model 20 System Software Only - German includes server software and 8 C•CURE Client licenses
CC800-30S-GR	C•CURE 800 Model 30 System Software Only - German includes server software and 16 C•CURE Client licenses
CC800-40S-GR	C•CURE 800 Model 40 System Software Only - German includes server software and 64 C•CURE Client licenses

## Dutch

CC800-1S-NV-NLD	C•CURE 800 Model 1 System Software only - Dutch - without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-NLD	C•CURE 800 Model 1 System Software Only - Dutch - includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-NLD	C•CURE 800 Model 5 System Software Only -Dutch - includes server software and 3 C•CURE Client licenses
CC800-10S-NLD	C•CURE 800 Model 10 System Software Only - Dutch includes server software and 3 C•CURE Client licenses
CC800-20S-NLD	C•CURE 800 Model 20 System Software Only - Dutch - includes server software and 8 C•CURE Client licenses
CC800-30S-NLD	C•CURE 800 Model 30 System Software Only - Dutch - includes server software and 16 C•CURE Client licenses
CC800-40S-NLD	C•CURE 800 Model 40 System Software Only - Dutch - includes server software and 64 C•CURE Client licenses

## Czech

CC800-1S-NV-CZK	C•CURE 800 Model 1 System Software only - Czech - without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-CZK	C•CURE 800 Model 1 System Software Only - Czech - includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-CZK	C•CURE 800 Model 5 System Software Only -Czech - includes server software and 3 C•CURE Client licenses
CC800-10S-CZK	C•CURE 800 Model 10 System Software Only - Czech includes server software and 3 C•CURE Client licenses
CC800-20S-CZK	C•CURE 800 Model 20 System Software Only - Czech - includes server software and 8 C•CURE Client licenses
CC800-30S-CZK	C•CURE 800 Model 30 System Software Only - Czech - includes server software and 16 C•CURE Client licenses
CC800-40S-CZK	C•CURE 800 Model 40 System Software Only - Czech - includes server software and 64 C•CURE Client licenses

## Polish

CC800-1S-NV-PL	C•CURE 800 Model 1 System Software only - Polish - without Badging license. Includes server software and 2 C•CURE client licenses
CC800-1ID-PL	C•CURE 800 Model 1 System Software Only - Polish - includes server software and 2 C•CURE client licenses. C•CURE ID badging software license included.
CC800-5S-PL	C•CURE 800 Model 5 System Software Only -Polish - includes server software and 3 C•CURE Client licenses
CC800-10S-PL	C•CURE 800 Model 10 System Software Only - Polish includes server software and 3 C•CURE Client licenses
CC800-20S-PL	C•CURE 800 Model 20 System Software Only - Polish - includes server software and 8 C•CURE Client licenses
CC800-30S-PL	C•CURE 800 Model 30 System Software Only - Polish - includes server software and 16 C•CURE Client licenses
CC800-40S-PL	C•CURE 800 Model 40 System Software Only - Polish - includes server software and 64 C•CURE Client licenses C•CURE 8000 ENTERPRISE SOLUTION

## C•CURE 800 Enterprise Solution

### Product Codes

#### English

**CC8000ES-S-EN** C•CURE 8000 Enterprise System Software Only –ENGLISH- includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-EN** C•CURE 8000 Plus Enterprise System Software Only –ENGLISH- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### French

**CC8000ES-S-FR** C•CURE 8000 Enterprise System Software Only – FRENCH- includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-FR** C•CURE 8000 Plus Enterprise System Software Only –FRENCH- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### Spanish

**CC8000ES-S-SP** C•CURE 8000 Enterprise System Software Only – Spanish- includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-SP** C•CURE 8000 Plus Enterprise System Software Only –Spanish- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### German

**CC8000ES-S-GR** C•CURE 8000 Enterprise System Software Only – German- includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-GR** C•CURE 8000 Plus Enterprise System Software Only –German- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### Dutch

**CC8000ES-S-NLD** C•CURE 8000 Enterprise System Software Only – Dutch- includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-NLD** C•CURE 8000 Plus Enterprise System Software Only –Dutch - includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### Czech

**CC8000ES-S-CZK** C•CURE 8000 Enterprise System Software Only – Czech - includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-CZK** C•CURE 8000 Plus Enterprise System Software Only –Czech- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

#### Polish

**CC8000ES-S-PL** C•CURE 8000 Enterprise System Software Only – Polish - includes server software and 128 C•CURE Client licenses and Broadcast Messenger Software.

**CC8000ESPLUS-S-PL** C•CURE 8000 Plus Enterprise System Software Only –Polish- includes server software and 128 C•CURE Client licenses, Broadcast Messenger Software, and enhanced reader capacity.

# Chapter 1 - Core System Software

## C•CURE Software Model Upgrades

### What is a Model Upgrade?

A model upgrade increases the system capacities which determine the number of Readers (Doors), Inputs and Outputs the system is capable of handling Ex. CC800-1-10-SU will increase the systems capacities from that of a Model 1 to a Model 10.

Product Codes	
CC800-1-5-SU-NV	Upgrade Model 1 System Software to Model 5 (VisionOne license not renewed)
CC800-1-5SU	Upgrade Model 1 System Software to Model 5 (VisionOne license is renewed)
CC800-1-5-SU-FV	Upgrade Model 1 System Software to Model 1 (also includes an upgrade from VisionOne to the complete Vision package)
CC800-1-10-SUNV	Upgrade Model 1 System Software to Model 10(VisionOne license not renewed). Includes new license only. System serial number, fax number and contact name are required at time of order.
CC800-1-10-SUFV	Upgrade Model 1 System Software to Model 10 (also includes an upgrade from VisionOne to the complete Vision package CC800-VSS). Includes new license only. System serial number, fax number
CC800-1-10-SU	Upgrade Model 1 System Software to Model 10(VisionOne license renewed). Includes new license only. System serial number, fax number and contact name are required at time of order.
CC800-5-10-SU	Upgrade Model 5 System Software to Model 10
CC800-5-20-SU	Upgrade Model 5 System Software to Model 20
CC800-5-30-SU	Upgrade Model 5 System Software to Model 30
CC800-5-40-SU	Upgrade Model 5 System Software to Model 40
CC800-10-20-SU	Upgrade Model 10 System Software to Model 20
CC800-10-30-SU	Upgrade Model 10 System Software to Model 30
CC800-10-40-SU	Upgrade Model 10 System Software to Model 40
CC800-20-30-SU	Upgrade Model 20 System Software to Model 30
CC800-20-40-SU	Upgrade Model 20 System Software to Model 40
CC800-30-40-SU	Upgrade Model 30 System Software to Model 40
CC800-40-8000SU	Upgrade Model 40 System Software to C•CURE 8000

## C•CURE Software Version Upgrades

### What is a Version Upgrade?

Customers who are under either Warranty or a Maintenance Agreement are entitled to a Version Upgrade at no charge. A Version Upgrade updates the existing software from an older version to the latest released version in that language.

Product Code	
CC800VUPG	C•CURE 800 Upgrade Kit - includes application software, manuals, and sentinel - Serial Numbers of current version and specific version number to be upgraded to must be submitted with order <i>SSA must be in place for this part to be made available to the customer</i>

### Software Support Agreement (SSA)

#### What Type of Order is a Software Support Agreement?

License Only Order

#### Requirements to Process Software Support Agreement?

Serial Number

#### Process for Software Support Agreement?

- Call Technical Support: +800 CALL TYCO (00800 22 55 8926) for SSA Status
- With correct Product code and price you can order in Echt
- Sales Order is Entered (Echt)
- Customer Service Rep Checks Documentation for Serial # and Customer (Echt)
- Software House release New SSA
- Customer Service Rep Releases Order and Forwards License to Customer

#### What do I get with an SSA in place?

##### Telephone Technical Support

During the Agreement Tyco Safety Products will only accept service calls from employees of the Systems Integrator on Record for the specific installation to which the support inquiry relates. Any other caller requiring technical assistance must forward to Software House, in writing, on the end user's company letterhead, either, (1)

permission from the end user to service the system or (2) stating that the Systems Integrator on Record has changed to the caller's current employer. End Users do not have access to direct technical support from Tyco Safety products.

##### Standard Telephone Assistance

This is currently provided by our Technical Support Centre during normal support hours (m - F 9:00 AM - 5PM) This includes dial-in-system interrogation and diagnosis for C•CURE 800 for those customers who have installed an access path.

To prepare for this, the end user should supply an auto-answer modem, 9600 baud or greater or a network connection, in advance of a remote service request. A dedicated phone line and modem are preferred, but not required.

##### Software Enhancement Update Service

This is included as required provision of new features and enhancements found in software version updates. This service also includes updated documentation as appropriate.

**Depending on the product, separate charges may be applicable to enhancements or major version upgrades.**

##### Software Maintenance Update Service

This will be included as part of the standard service.

##### Firmware Updates

Firmware updates are provided for apC/8X and apC/L field panels and is provided for all **Standard Service** customers, on request.

## Chapter 2 - Software Support Agreements

Part Numbers for Software Support Agreements (SSA's)

### Product Codes

CCSM80-1S	Standard Service for C•CURE 800 Model 1
CCSM80-5S	Standard Service for C•CURE 800 Model 5
CCSM80-10S	Standard Service for C•CURE 800 Model 10
CCSM80-20S	Standard Service for C•CURE 800 Model 20
CCSM80-30S	Standard Service for C•CURE 800 Model 30
CCSM80-40S	Standard Service for C•CURE 800 Model 40
CCSM8000S	Standard Service for C•CURE 8000
CCSM8000PLUSS	Standard Service for C•CURE 8000 Plus
CCSM80-V	C•CURE 800 Vision client uplift, per workstation
CCSM80-80-OP-BIDI	CCSM80-OP Bi-directional serial interface
CCSM80-OP-GT	CCSM80-OP Guard Tour
CCSM80-OP-BDMS	CCSM80-OP Broadcast Messenger
CCSM80-OP-ASM	CCSM90-OP Asset Manager
CCSM80-OP-NETV	CCSM80-OP C•CURE NetVue
CCSM80-OP-ALOK	CCSM80-OP Area Lockout
CCSM80-OP-PSWD	CCSM80-OP Enhanced Password Protection
CCSM80-OP-ADM	CCSM80-OP Advanced Door Monitoring
CCSM81RR-M1/5	CCSM81RR Re-instatement for lapsed coverage FOR MODEL 1 or 5 SOFTWARE
CCSM81RR-M10/30	CCSM81RR Re-instatement for lapsed coverage FOR MODEL 10, 20 or 30 SOFTWARE
CCSM1RR-M40+	CCSM81RR R-instatement for lapsed coverage FOR MODEL 10, 20 or 30 SOFTWARE
CENTMONSM-10	Standard Service for C•CURE 800 Central Monitoring. For 10, 20 regional C•CURE 800/8000 servers (CENTMON-10S)

C•CURE 800

### C•CURE 800/8000 Minimum Hardware Requirements

#### C•CURE 800/8000 Server WITHOUT Enhanced Reporting option

##### Processor

Model 1 through 10 600 MHz Intel Pentium III or higher  
Model 20 through 40 1.5 GHz Intel Pentium III or higher  
Model 8000 and 8000 Plus 2.0 GHz Intel Pentium IV or higher  
Free Hard Disk Space 2.0 GB

##### Memory

Model 1 through 10 512 MB RAM  
Model 20 through 8000Plus 1.5 GB RAM

Network Card 10 BaseT  
CD-ROM Drive 10X  
Monitor/Video Adapter board 17" SVGA (1024 x 768)  
Operating Systems MS Windows® 2003 Server (Service Pack 3), MS Windows XP  
Mouse PS/2 bus type  
Ports 2 serial, 1 parallel (with C•CURE 800 v8.x a USB port is required)  
Backup Device Tape or CDRW  
Modem 56.7 Kbps  
Sentinel Supplied by Software House  
Digiboard 8 port (Models 20/30/40)

#### C•CURE 800/8000 Server WITH Enhanced Reporting option

##### Processor

Model 1 through 10 1.5 GHz Intel Pentium III or higher  
Model 20 through 40 1.8 GHz Intel Pentium III or higher  
Model 8000 and 8000 Plus 2.4 GHz Intel Pentium IV or higher  
Free Hard Disk Space 3.0 GB

##### Memory

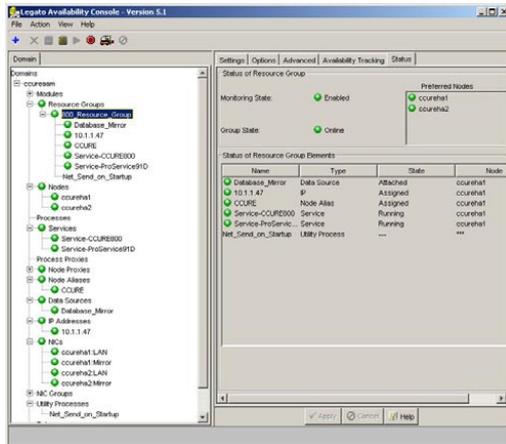
Model 1 through 40 1 GB RAM  
Model 8000 and 8000 Plus 2 GB RAM  
Network Card 10 BaseT  
CD-ROM Drive 10X  
Monitor/Video Adapter board 17" SVGA (1024 x 768)  
Operating Systems MS Windows® 2003 Server (Service Pack 3), MS Windows XP  
Mouse PS/2 bus type  
Ports 2 serial, 1 parallel (with C•CURE 800 v8.x a USB port is required)  
Backup Device Tape or CDRW  
Modem 56.7 Kbps  
Sentinel Supplied by Software House  
Digiboard 8 port (Models 20/30/40)

#### C•CURE 800/8000 Client

Processor 400 MHz Intel Pentium or higher  
Free Hard Disk Space 2.0 GB  
Memory 256 MB RAM  
Network Card 10 BaseT  
CD-ROM Drive 10X  
Monitor/Video Adapter board 17" SVGA (1024 x 768)  
Operating Systems MS Windows® XP Professional, XP  
Mouse PS/2 bus type  
Ports 2 serial, 1 parallel  
Modem 56.7 Kbps

*\*MS Windows 2003 Professional or Server requires more memory and hard disk space than MS Windows NT, which should be taken into consideration when specifying minimum hardware requirements. C•CURE 800 servers to be connected to C•CURE Central have additional requirements. With today's pace of technology, Software House must continue to dedicate resources to meeting today's requirements, and the future needs of the worldwide market. As a robust security application, C•CURE 800 leverages the important features that can only be found with MS Windows 2003. Therefore, MS Windows 95 is no longer supported with C•CURE 800/8000 clients and badging stations and MS Windows 98 will no longer be supported with the release of C•CURE 800 v8.0. We will continue to support MS Windows 2000 Professional as the primary client only platforms.*

## Introduction to System Redundancy



### Features

- Emergency recovery of C•CURE 800 system
- Manual or automatic changeover
- LAN or WAN connectivity
- Second C•CURE license included in package
- Real time data backup from primary server

### System Redundancy

To provide redundancy for C•CURE 800/8000 installations, Software House offers 3 different solutions. These can be combined in order to increase the level of Redundancy and Security.

For new installations you need to order C•CURE Software in redundant Software. This means you will receive 2 copies. To upgrade an existing C•CURE800/8000 installation to redundancy systems you must order redundancy upgrades Software.

### The 3 Redundancy Solutions are:

#### Cold Backup

Software House provide the possibility to setup a second server fully configured and available to takeover in case of failure.

The take-over process and start-up have to be carried out manually.

#### Hot Standby

With Hot Standby a second server is fully configured and copies in real time all data from the primary server. One condition of this design is that the servers are in the same location and not more than 100 Meter from each other (greater with via Fibre optic).

This solution is known as Disk Level Mirroring Automated Availability Manager® (AAM) from third party EMC will manage the mirroring and the Automatic take-over when necessary.

#### Warm Failover

With Warm Failover a second server is fully configured and copies in real time over WAN all data of the primary server. The second server does not need to be on the same location. The EMC Software RepliStor® will manage the Data replication at File level and manage the system take-over when necessary.

It is Imperative in any WAN high availability system, to have some level of human interaction to determine that a true failure has occurred and command/control the fail-over.

# Chapter 3 - System Redundancy

## Cold Backup

### C•CURE 800 Disaster Recovery Systems

To provide a cold backup for C•CURE 800/8000 installations, Software House provides a duplicate software sentinel key required to run the C•CURE 800/8000 management server software application.

The intent is to provide C•CURE 800/8000 users the option of a second server computer fully configured and available to take-over the primary server's operations in the event of a catastrophic failure with the primary C•CURE 800/8000 security management software and/or hardware.

The duplicate sentinels are not to be used in conjunction with each other. Specifically, both the primary and secondary systems must not be operated simultaneously. The only exception shall be to allow for data transfers for the purpose of updating the cold back-up computer's database.

When an order is placed for this item, both the dealer/Integrator and end user must sign a document (Addendum 2) outlining the restrictions for use prior to Software House accepting the order.

*Please contact your Software House representative for further information.*

## Hot Standby by System Mirroring

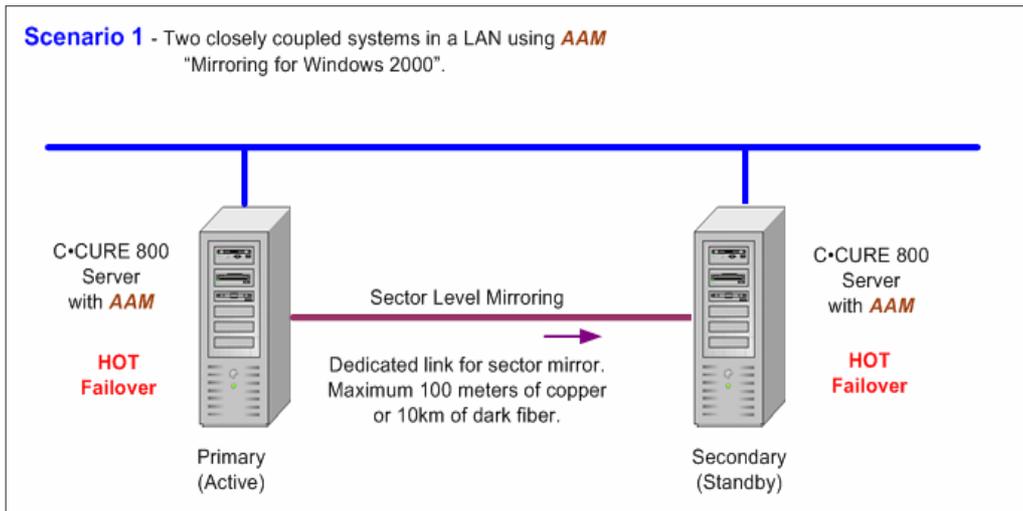
### Definition:

Mirroring is the continuous process of copying important information from an active server to a standby server. This information is copied at the block and sector level, which is the lowest level.

When a failover occurs using this method there is little or no data loss. This method is the ideal when the two systems are on a LAN.

AAM provides the system monitoring on the high availability servers. The AAM software will then detect failures and provide the triggers to initiate fail-over to the back-up server or other actions to avoid system downtime. AAM must be purchased and utilised together on all servers to provide system Hot standby LAN redundancy.

C•CURE 800



### Part Number Redundancy Management

#### Product Codes

CC800-AAM	One License of AAM to achieve redundancy on Windows 2000 Servers
CC800-AAM-2	Two Licenses of AAM to achieve redundancy on Windows 2000 Servers

*(For C•CURE software part numbers go to page 17 and 18)*

# Chapter 3 - System Redundancy

## Warm Failover

Definitions:

**Replication** is the continuous process of copying important information from an active server to a standby server across a WAN. This method, sometimes called data vaulting, is done at the file system level and is the only method that can be used across a WAN.

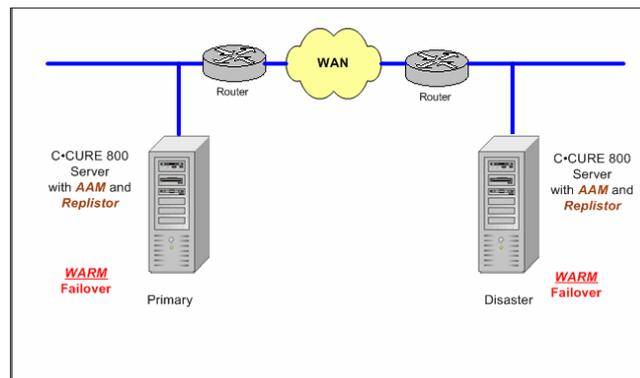
**Failover** is the transfer of control from an active C•CURE 800/8000 system to a standby C•CURE 800/8000 system.

Software House has qualified EMC's AAM to provide failover services over LAN and WAN topologies. AAM allows you to define resource domains, and to specify the rules and events that manage failover and recovery.

The solution utilises the EMC Software RepliStor® and Automated Availability Manager® (AAM) products. RepliStor provides asynchronous data replication between the primary and the secondary server(s). RepliStor manages continuous data availability ensuring that data is always at least two places and minimises recovery time should the primary server fail.

AAM provides the system monitoring on the high availability servers and will detect failures and provide triggers to initiate fail-over to the back-up server or other actions to avoid system down-time. AAM and RepliStor must be purchased and utilised together on all servers to provide system fail-over WAN redundancy.

An important distinction between the WAN redundant AAM/RepliStor solution and the Local Area Network configured EMC AAM® solution is the WAN solution requires a "man in the loop" or warm redundancy in the WAN environment if a secondary network is not used. This is necessitated by the facts of an enterprise WAN network. This situation is discussed below. A fully automated redundancy can be accomplished with EMC Software RepliStor/AAM by deploying a dedicated second network between the high availability systems servers.



### Product Codes

CC800-AAM	One License of AAM to achieve redundancy on Windows 2000 Servers.
CC800-AAM-2	Two Licenses of AAM to achieve redundancy on Windows
CC800-LREDPK	Two Licenses of EMC AAM and Two Licenses of RepliStor (for MS Windows)
CC800-LREP	EMC RepliStor for MS Windows single License for C•CURE software Part numbers go to page 17.

# Chapter 3 - System Redundancy

## The “Split Brain Problem”:

An important consideration for setting up a WAN High availability solution of any kind in an enterprise WAN environment, is the simple fact that many points of failure exist and that in today’s networking world there are many self correcting automated systems which may or may not deal with these failures.

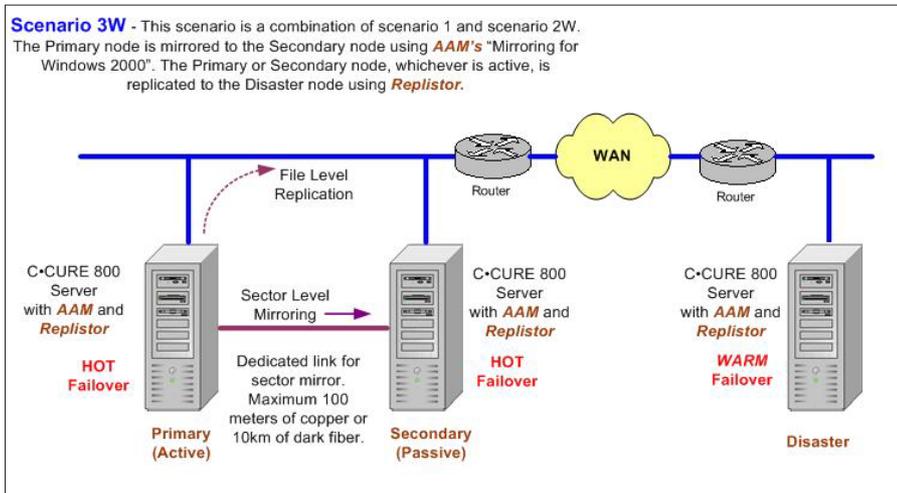
In effect, two systems would think they were the Primary “brain”. Therefore, it is imperative in any WAN high availability system, such as EMC AAM/RepliStor, to have some level of human interaction to determine that a true failure has occurred and command the fail-over.

For example, in a situation in which two servers are “high availability” redundant over a WAN, and some component on the network, such as router or a switch fails for a time, the second server would detect the failure to communicate and take over control.

AAM and RepliStor can simplify the process and make it a single click of a button. The situation of “Split Brain” can be overcome if a duplicate or second network is available between the servers so each can be assured of the true availability status of one another.

However, if that failure was temporary (i.e. a network subsystem identified the problem) and the component then came back on line, the original primary Server which never lost connection to the applications would be maintaining control as well.

## Other Configurations



## Professional Services

Software House is offering the EMC Software AAM/RepliStor solution only when purchased with Professional Services. All orders for this WAN solution will only be accepted with a Professional Services component covering on-site set-up and installation. The cost of installation will vary based on the network complexity, number of servers and physical proximity of each site to be set up. Quotation of the set-up and installation will be on a site-by-site basis to be coordinated through Software House Professional Service .

Once the site survey is completed, Software House and EMC Software personnel will undertake the onsite set-up and installation. In addition to installation and set-up of the WAN solution, Software House and EMC Software will provide a “run book” and backup onfiguration setup at every installation site. This “run book” will highlight the configuration of the WAN solution when it is successfully operational at the customer site.

An important step of the quotation process is the completion of a site survey form, which will be sent to the end user site (through the integrator) to provide all relevant information on the physical environment and the information technology network configuration for the proposed High Availability solution. Information such as the use of a DNS server and the network structure is critical in assessing the viability and cost of implementing the EMC Software High Availability solution.

The “run book” will be provided to the integrator/customer as well as be kept on file in the Software House Technical Support Department for reference during service calls.

<b>Product Codes</b>	
<b>English</b>	
CC800-20RDS-EN	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-30RDS-EN	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-40RDS-EN	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ES-RDS-EN	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ESPLUS-RDS-EN	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>French</b>	
CC800-20RDS-FR	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-30RDS-FR	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-40RDS-FR	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ES-RDS-FR	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ESPLUS-RDS-FR	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>Spanish</b>	
CC800-20RDS-SP	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-30RDS-SP	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one C800-AAM-2 (purchased separately).
CC800-40RDS-SP	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ES-RDS-SP	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ESPLUS-RDS-SP	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).

## Product Codes Cont'd

### German

CC800-20RDS-GR	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-30RDS-GR	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-40RDS-GR	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ES-RDS-GR	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ESPLUS-RDS-GR	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).

### Dutch

CC800-20RDS-NLD	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-30RDS-NLD	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC800-40RDS-NLD	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ES-RDS-NLD	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
CC8000ESPLUS-RDS-NLD	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).

## Chapter 3 - System Redundancy

<b>Czech</b>	
<b>CC800-20RDS-CZK</b>	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC800-30RDS-CZK</b>	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC800-40RDS-CZK</b>	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC8000ES-RDS-CZK</b>	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC8000ESPLUS-RDS-CZK</b>	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>Polish</b>	
<b>CC800-20RDS-PL</b>	C•CURE 800 Model 20 Redundant System Software Only (2 copies) Includes server software, 8 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC800-30RDS-PL</b>	C•CURE 800 Model 30 Redundant System Software Only (2 copies) Includes server software, 16 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC800-40RDS-PL</b>	C•CURE 800 Model 40 Redundant System Software Only (2 copies) Includes server software, 64 C•CURE Client licenses each. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC8000ES-RDS-PL</b>	C•CURE 8000 Enterprise Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).
<b>CC8000ESPLUS-RDS-PL</b>	C•CURE 8000 Enterprise PLUS Redundant System Software Only (2 copies) Includes server software, 128 C•CURE Client licenses each, and Broadcast Messenger Software and enhanced reader capacity. This order must include two CC800-AAM or one CC800-AAM-2 (purchased separately).

## Hardware Requirements:

### Standard Redundant Tower

2 units DELL Power Edge 2800, tower chassis  
Intel Xeon, 2.8GHz, 1M cache  
Single processor  
1GB DDR SDRAM  
PS/2 Keyboard and Mouse  
Dell E1703FP Flat Panel Monitor  
PERC4-DI 128MB, 2 Internal Channel Controller, Embedded RAID  
Five - 36GB SCSI, 10K RPM, U320, Disk Drive [RAID 1 for OS, RAID 5 for C-CURE]  
3.5 inch, 1.44MB, Floppy Disk Drive  
24X CD-RW / DVD ROM  
Tape Backup, 36/72GB, DAT72  
MS Windows 2003 Server, 5 Client  
Redundant Power Supply  
Dual embedded Intel 10/100/1000 NIC  
Intel Pro 100S NIC  
Integrated Video

### Standard Redundant Rack Mount Server

2 Units DELL Power Edge 2850, rack chassis  
Intel Xeon, 2.8GHz, 1M cache  
Single processor  
1GB DDR SDRAM  
PS/2 Keyboard and Mouse  
Dell E1703FP Flat Panel Monitor  
PERC3-DI 128MB, 2 Internal Channel Controller, Embedded RAID  
Five - 36GB SCSI, 10K RPM, U320, Disk Drive [RAID 1 for OS, RAID 5 for C-CURE]  
3.5 inch, 1.44MB, Floppy Disk Drive  
24X CD-RW / DVD ROM  
Dell Rapid Rails for Dell Rack  
MS Windows 2003 Server, 5 Client  
Redundant Power Supply, 500 Watt  
Dual Integrated NICs  
Integrated Video

*\*Exact specifications may change depending on model availability from Dell.*

## C•CURE ID Badging Software



### Features

#### CONFIGURATION

- Capture, import and display portraits
- Signature capture
- Integrated iris control and zoom capability

#### BADGE LAYOUT

- Create/edit layout
- Full access to text and layout properties
- Image “ghosting” and “see-through”
- Toolbar for quick access to badge design tools

#### PRINTING

- Double-sided printing
- Batch mode printing
- Design multi-badge sheet layouts

#### NETWORK

- Shared resources across multiple workstations

### C•CURE 800 ID Badging Solutions

C•CURE® 800/8000 provides users with the basic ability to capture, import, and display images from within the standard system personnel window.

For sophisticated badging however, C•CURE® ID provides a fully integrated photo imaging application that runs on any C•CURE client supporting Windows® XP, NT, or 2000.

C•CURE ID's powerful photo imaging features a user-friendly badge layout editor, support for multiple graphic formats, network retrieval of images, controlled iris, and zoom capability. Also included are signature capture, unlimited badge layouts, and background display support.

#### Integrated iris control and zoom capability

Users can specify different iris settings for live video feeds as well as control the mechanical zoom function of the camera directly from the C•CURE 800 application.

#### Share resources across multiple workstations

Photographs, signatures or logos can be captured locally, using a live video camera or scanner connected to the workstation, or remotely, using a portable still video camera. This allows significant savings in time, capital expenditures and staff overhead for a customer who may have a large mobile workforce or several facilities since only one badge production facility is necessary.

#### Batch mode printing

Print badges in batches to save time and work more efficiently.

#### Design multiple badge layouts

C•CURE ID allows users to create multiple badge layouts. For example, permanent badges can have a different design and layout than temporary or visitor badges in order to make a quick distinction.

#### Toolbar for quick access to badge design tool

C•CURE ID's Graphical User Interface (GUI) includes an easy-to-use toolbar that allows the user to quickly pick necessary tools when creating a badge. “Ghosting” images and backgrounds. All background images and portraits can be “ghosted” or made semi-transparent to provide aesthetically pleasing badges.

# Chapter 4 -ID Badging Software

C•CURE 800

Application Features	No Badging	C•CURE
<b>Configuration Features</b>		
Capture Portraits	NO	YES
Import Portraits	YES	YES
Display Portraits	YES	YES
Display Signature	YES	YES
Signature Capture	NO	YES
Cropping	NO	YES
Device Setup	NO	YES
Integrated Iris Control (Brightness)	NO	YES
Integrated Zoom	NO	YES <sup>1</sup>
Automatic Directory Tree For Images	NO	YES
Choose Image Format	NO	YES
Software Controlled Camera (CC800-VA2)	NO	YES
Use of Multiple Images in Badge & Sheet	NO	YES
Any device with TWAIN or Video for MS Windows Interface	NO	YES
Support for FlashBus and Flash3D	NO	YES
<b>Badge Layout Features</b>		
Create / Edit Layout (WYSIWYG drawing environment)	NO	YES
Full access to text properties	NO	YES
Full access to layout properties	NO	YES
Rainbow Images	NO	YES
Image “ghosting” and “see through”	NO	YES
Ghost Background Image	NO	YES
Create borders for text and image objects	NO	YES
Create “on-the-fly” text and data strings	NO	YES
Tool bar for quick access to badge design tools	NO	YES
“Size to fit” and “maintain aspect ratio”	NO	YES
Data expressions for text	NO	YES
Specify location of badging images	YES	YES
Send Data To Badge Preview	NO	YES
<b>Printing Features</b>		
Badge Printing	NO	YES
Double-Sided Printing	NO	YES
Magnetic Encoding	NO	YES
1D Barcode Support	NO	YES
Batch Mode Printing	NO	YES
2D Barcode Support	NO	YES
Print to (pre-printed) badge forms	NO	YES
Design Multi-Badge Sheet Layouts	NO	YES

# Chapter 4 -ID Badging Software

Application Features	No Badging	C•CURE
Specify Starting Position For Printing Sheet	NO	YES
Specify Number Of Badges Held In Print		
Queue	NO	YES
Sheet Layout	NO	YES
Specify Alternate Resolutions	NO	YES
Specify Offset Origin	NO	YES
<b>Languages</b>		
Support Multiple Languages	YES	FUTURE

## Minimum System Requirements

### Technical Specifications

#### C•CURE ID Client Workstation

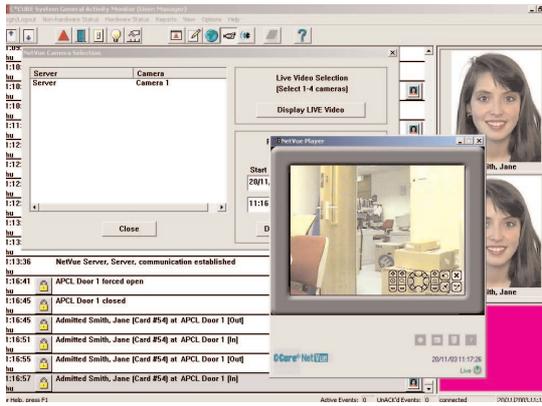
Processor	400 MHz Intel Pentium
Memory	256 MB RAM
Network Adapter	10base-T
Disk Drive	2 GB
Monitor	17" SVGA (1024 x 768)
Operating Systems	Windows 2000/NT/XP
Mouse	PS/2 bus type
Ports	2 serial, 1 parallel

### Product Code

**CC800-IDS**      **C•CURE ID Software License** Includes client license for complete C•CURE ID option which includes signature capture/display, two-sided badge printing, unlimited badge layouts, and batch mode printing.

## C•CURE NetVue Software

C•CURE 800



### Features

- Interface with various digital video servers
- Interface with video server operations including:
  - Video record and display
  - Live video and display
  - Multiple video screens that support up to four video inputs
  - Dynamic camera positioning using NetVue icons
- Operator restrictions based on cameras and video operations
- Video Verification

C•CURE NetVue is an option within C•CURE 800/8000 that provides seamless integration with digital video management systems, such as American Dynamics' Intellex,

Nice Systems NiceVision Pro and Harmony, and Loronix CCTVware.

### C•CURE NetVue - Quick Reference Chart

#### Technical Specifications

	Intellex	Loronix	Nice
Vendor hardware models supported	DV8000 and DV16000	CCTVware - Remote and enterprise	NiceVision Harmony and NiceVision Pro
Vendor Software	v2.4 and 3.1	v4.0 and v4.3	NiceVision Harmony ,version(s) supported & Pro v 7.1 and v 8.0
Model Number	CC800-NETVUEI	CC800-NETVUEL	CC800-NETVUEN
Product Code	B	B	B
C•CURE 800 Versions Supported	DV16000 V7.0 and up; DV8000 V7.2 and up	v8.0 and up	NiceVision -v7.0 and up: Harmony & Pro - v8.0 and up

#### Product Codes

##### CC800-NETVUEI

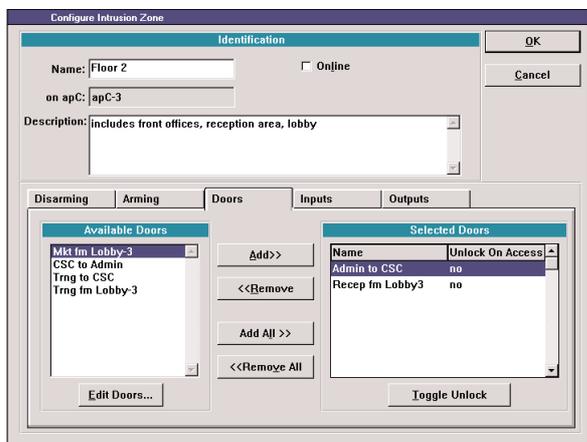
**C•CURE NetVue interface to Intellex** (2.1 and higher) Includes licensing to enable C•CURE Netvue for 1 C•CURE 800/8000 server and unlimited number of Intellex. This option requires C•CURE 800 v 7.0 or higher. System serial number, fax number and contact name are required at time of order.

##### CC800-NETVUEN

**C•CURE NetVue interface to Nice Systems** Nice Vision (version 2.0 and higher) Includes licensing to enable C•CURE NetVue for 1 C•CURE 800/8000 server and unlimited number to NiceVision systems. This option requires C•CURE 800 v7.0 or higher. System serial number, fax number and contact named or required at time of order.

## Software Options

### Keypad Commands/Enhanced Intrusions Zones on iSTAR Pro



#### Features

- Lock/Unlock/Secure Door Momentarily Unlock Door
- Activate/Deactivate Event Arm/Disarm Event
- Latch/Unlatch Event
- Activate/Deactivate/Pulse Output
- Connect apC (dial-up)
- Activate/Deactivate CCTV Action
- Arm/Disarm/Force Arm Intrusion Zone (IZ)

Software House have developed a number of software modules to increase the feature set of the core software and to enable some of the unique software features.

These modules are ordered separately to provide features, some of which are dependent controllers on site.

Keypad Commands (KPCs) allow an authorised cardholder to activate events with a command via the RM keypad. A KPC is a unique nine-digit number entered on the keypad (with optional prompting) that activates a specific event.

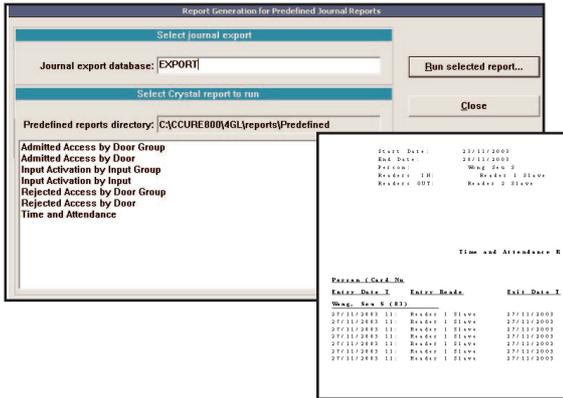
Some KPCs are used as intrusion zone pass codes but a KPC event may be configured to execute any allowable event action and is not limited to controlling and displaying intrusion zones. The KPC may be configured to require a card presentation and, optionally, a PIN to validate the KPC.

#### Product Code

CC800-IZKP

**C-CURE 800 Keypad Commands/Enhanced Intrusion Zones** for iSTAR Includes licensing to enable the use of keypad commands and enhanced intrusion zone functional with the iSTAR Intelligent Network Controller on a C-CURE 800 Model 1 configuration. System serial number, fax number and contact name are required at time of order.

## Enhanced Reporting



### Features

- Better and easier access to the valuable data stored in the C•CURE 800/8000 journals
- Pre-configured reports to address specific reporting needs
- The ability for the user to customise additional reports
- Schedule reports via the Windows 2000 scheduler utility
- E-mail the results of a scheduled report to an e-mail address
- Print the report to a specified printer

The Enhanced Reporting option allows a C•CURE 800 Model 1 customer to add the functionality of increased report generation and formatting to the base C•CURE 800 configuration.

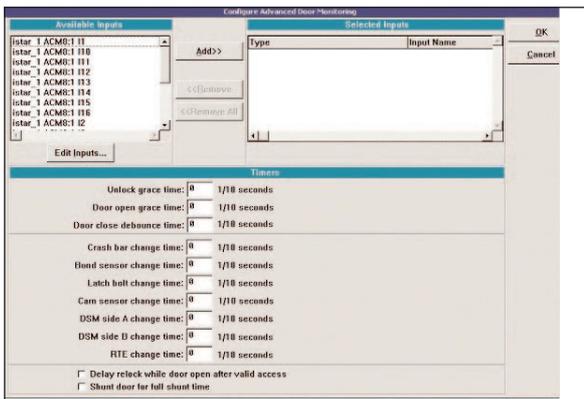
**Crystal Reports®** –Crystal Reports is a third party report generation tool. It accesses databases via ODBC and can be used to design and administer reports.

**Journal Export Database** – The new database that contain the extracted journal data. Sometimes referred to as the Enhanced Reporting database

### Product Code

**CC800-RPTG** C•CURE 800 Enhanced Reporting option Includes licensing to enable the use of enhanced reporting on a C•CURE 800 Model 1 configuration. Generation of pre-packed reports does not require a Crystal reports license. Generation of custom reports by the end user does require the user to acquire a separate Crystal Reports v8.5 or v9.0\* Standard or Developer's License. System serial number, fax number and contact name are required at time of order.

## Advanced Door Monitoring (on iSTAR Pro)



### Features

- Up to 16 inputs per door
- 4 event monitoring of each point
- Multiple lock sensor inputs per door

Advanced Door Monitoring adds inputs for monitoring doors, including lock sensor status inputs and various lock release devices such as:

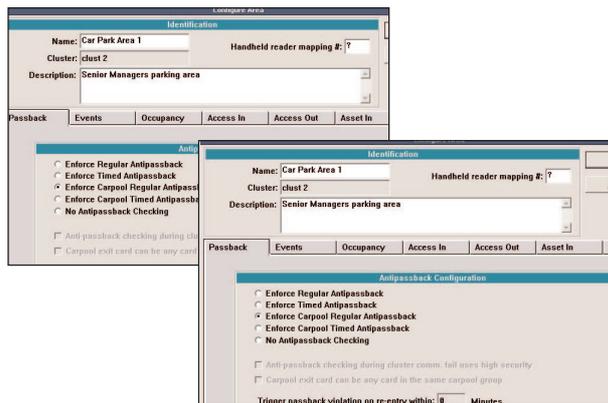
- Fire alarm
- Crash bar
- Key override
- Power failure

The enhancement supports multiple release devices per door as well as multiple DSM and RTE inputs per door.

### Product Code

**CC800-ENHDOOR** C•CURE 800 Advanced Door Monitoring Option System serial number, fax number and contact name are required at time of order.

## Carpool Anti-Passback (on iSTAR Pro)



### Features

- Can be timed or fixed
- Users can be given pass-through times
- Entry card can be different to exit card

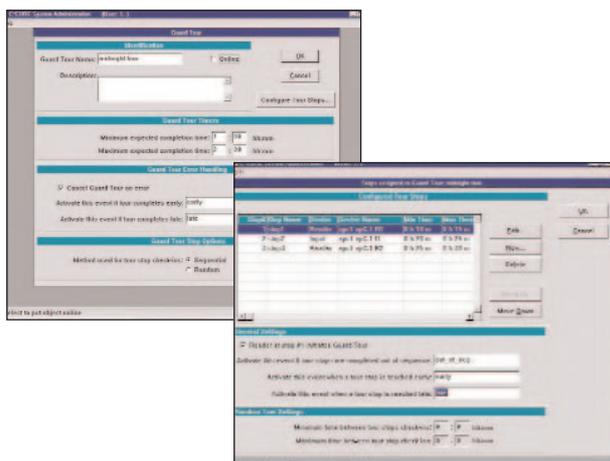
Carpool anti-pass back enforces anti-pass back on a group of individuals configured as a carpool group. It allows users to change the pass back information in multiple personnel records from a single card read. A user can designate carpool areas that enforce anti-pass back for a specified group when a single specified card is read at the carpool area reader.

The user can then grace the cardholders in this group. CC800-CRPL C•CURE 800 Carpool Anti-pass back System serial number, fax number and contact name are required at time of order.

### Product Code

**CC800-CRPL** C•CURE 800 Carpool Anti-pass back. System serial number, fax number and contact name are required at time of order

## Guard Tour



### Features

- Provides you the ability to configure pre-determined security tours for guards to follow
- Readers or Inputs for stops
- Reader can be used to initiate the tour
- Tours can be sequential or random
- Optional Min / Max times for each stop and for the total tour

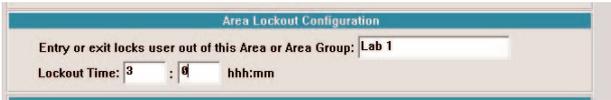
The Guard Tour option of C•CURE 800 allows customers to set up pre-determined Guard Tours for a security guard to follow in order to better automate their security processes.

Guard Tour requires C•CURE 800/8000 version 6.0.1 or higher.

### Product Code

**CC800-GT** C•CURE 800 Guard Tour Option - includes licensing to enable Guard Tour for 1 C•CURE 800 server  
Only for C•CURE 800 English version

## Area Lockout (on iSTAR Pro)



### Features

- Only with iSTAR Pro
- Personnel or personnel groups
- Lockout Timer
- Area or area groups

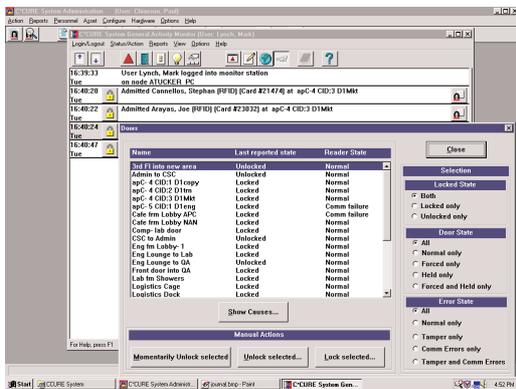
Allows a user to deny personnel or personnel groups' access from an area for a specified period of time. A user can configure lockouts for a single area or for area groups.

The lockout timer starts when the personnel enter or exit the Lockout area. Utilised in conjunction with the iSTAR Intelligent Network Controller.

### Product Code

**CC800-ARALK** Area Lockout option Includes licensing to enable the Area Lockout feature in all Models of C•CURE 800/8000 utilising the iSTAR Intelligent Network Controller. System serial number, fax number, and contact name are required at time of order.

## Central Monitoring



### Features

- Monitor multiple system from one guard station
- Increased site efficiency
- Not dependant on C•CURE Central

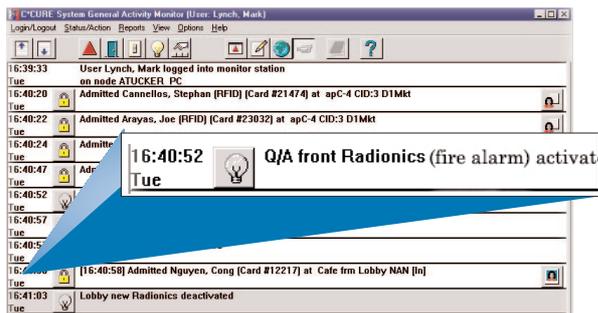
The Central Monitoring option of C•CURE 800 allows customers to monitor multiple C•CURE servers from one guard station with their existing C•CURE 800 system. Central Monitoring requires version 6.0.1 or higher, plus licensing for each server.

You select multiple C•CURE 800 servers to monitor allowing you to monitor locations from one guard station thus providing backup security management.

### Product Code

**CENTMON-1S** C•CURE 800 Central Monitoring Option software only - includes licensing to enable alarm event monitoring of one regional C•CURE 800 servers (Price per server)

## Bi-directional Serial Interface



### Features

- Integration with Third Party Systems  
Examples might include the following:
  - Dome control
  - Elevators
  - EAS
- Plus ...  
Support for secondary alarm annunciation for fire and burglar panels

Multiple device interfacing C•CURE 800 provides third party device integration via bi-directional serial interface. The interface has been implemented to receive messages from third party devices and interpret them for C•CURE 800. The messages are translated as C•CURE 800 journal messages or as C•CURE 800 events. The interface has been designed to communicate with the C•CURE 800 driver via RS-232 serial port or remotely through TCP/IP via a qualified terminal server (Lantronix UDS-10 and SYS-TECH models 3182, 3184, 3282 and 3284).

The bi-directional interface provides output messages to third party devices by the use of action activation.

The bi-directional interface is available with templates for use with an intercom or intrusion detection systems, as well as a powerful user configurable option allowing interaction with many ASCII serial interface devices. The current templates for the bi-directional interface are for the Radionics 6500 and 6600 intrusion alarm receivers and the Zenitel Stentofon AlphaCom M intercom system, Inovonics RF panic alarm.

### Product Code

CC800-GPSERV	General Purpose serial interface option – user configurable Bi-directional serial interface
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## C•CURE 800 Configuration (CF) Import/Export Tool



### Features

- Export and Modify configuration data from an existing C•CURE 800/8000 database
- Create new configuration data from scratch
- Import configuration data into a C•CURE 800/8000 database

The C•CURE Configuration Import/Export Utility is a tool that allows customers to design and load security objects into the C•CURE 800/8000 system.

Using the tool, customers can design and enter configuration data into a Microsoft Excel spreadsheet to quickly and easily configure the C•CURE 800/8000. This data includes apCs, apC Inputs, apC Outputs, apC Readers, iSTARs, iSTAR Inputs, iSTAR Outputs and iSTAR Readers, as well as Bi-directional interface data.

Note: Training is required prior to purchasing the C•CURE Configuration Import/Export Utility, either through our web-based training program or as part of the standard C•CURE 800 Advanced Integrator or Installer training curriculum. Usage of the tool on live installations is a licensable option to each C•CURE 800 site. The license cost of the option varies with the size of the C•CURE 800 installation. The C•CURE Configuration Import Export Utility is version dependent. This utility can be only used with a C•CURE 800/8000 8.3 database. There are also versions 8.1, and 8.2 of the C•CURE 800 with their own versions of this tool.

### Product Code

For Part Number contact Application Engineering	C•CURE 800 Configuration (CF) Import/Export Tool
---	--

### Asset Management System

C•CURE 800



#### Features

- Link Assets with Employees - use C•CURE 800/8000's Asset Manager to link assets with authorised employees
- Automatic Hands-Free Operation - employees simply walk through the door or other portal; no buttons to push or cards to swipe
- Flexible Coverage Zone - operates at very short range for door control; or coverage can be expanded across a broad detection zone for monitoring
- Multi-Tag Read - instantaneously reads multiple tag across a broad corridor or within secure areas; no need to herd employees through security gates or choke points
- Covert Monitoring - a wide variety of antenna options offer unobtrusive and aesthetically pleasing installation choices; antennas can be hidden in ceilings, walls and, even picture frames

This solution works only with apC panels and is not supported by the iSTAR or iSTAR Pro controllers.

#### Product Code

**CC800-AMGR** C•CURE 800 Asset Management Software Option Includes licensing to enable Asset management for 1 C•CURE 800/8000 server. System serial number, fax number and contact name are required at time of order. Supported with apC panels only.

*Contact your Software House Area Sales Manager for more information about Visitor Management*

### Visitor Management Systems



#### Features

- Pre-register visitors and groups
- Visitor self-registration option
- Print badges in advance or upon arrival
- Email employees of visitor arrival
- Link to the C•CURE 800 employee database
- Monitor and track visitor movements through C•CURE 800
- Issue temporary access cards for use with C•CURE 800
- Links to Government Watch List

#### STOPware's PassagePoint Software

With STOPware's PassagePoint™, the front desk personnel can track visitors as they enter and exit the facility. Using the optional Intranet module, employees can pre-register visitors utilising a web browser interface. By combining PassagePoint with the C•CURE 800 Integration Add-on license, front desk personnel can additionally issue access cards and search the C•CURE cardholder directory. STOPware PassagePoint is available in two versions:

Professional and Enterprise: Both products have identical functionality except that the Enterprise Edition supports the use of MSSQL and ORACLE databases.

#### Additional Benefits

- Custom design badges, or use a template
- Use built-in reports, or create your own
- Display visitor agreements (NDA)
- Capture and store signatures
- Look out/watch list with photos
- Scan business cards, driver's licenses or passports
- Print and read barcodes
- Track deliveries and property

Contact your local Tyco Fire and Security Representative for your product code.

## C•CURE Central v2.2



### Features

- Web browser access to centralised database of cardholder records
- Centralised personnel and cardholder administration
- Global Clearances
- Seamless integration with the C•CURE 800 system
- Sophisticated reporting capabilities for personnel and clearance information including scheduled and custom reports utilising Crystal Reports
- Supports MS SQL Server 2000

### Web Based Security Management System

C•CURE Central allows users to administer personnel and access clearances over a network of C•CURE 800/8000 systems, anytime, from anywhere in the world.

C•CURE Central allows users to add personnel records, edit existing records, or change access clearances, all from the convenience of a web browser application. C•CURE Central provides users with the ability to centrally manage card enrollment in an enterprise access control system. Cardholder updates are automatically distributed to selected C•CURE 800 servers in the C•CURE Central network. The platform independent architecture of C•CURE Central supports the industry standard network protocol, TCP/IP, which allows seamless integration with other systems and components that may already exist within an enterprise's network.

The C•CURE Central client provides security in the form of authentication via a login username and password. All transactions between the browser client and the web server are encrypted via Secure Sockets Layer (SSL). In addition, public key encryption is used between the C•CURE Central server and the local C•CURE system servers to enhance data security.

### Additional Benefits

- Enables a single card to be valid across the entire enterprise of C•CURE 800 systems
- Scalable system to meet the needs of any enterprise
- Encrypted communications with Secure Sockets Layer . (SSL) to enhance data security
- Filter Replication – provides faster selected replication of personnel data to servers
- Support for up to unlimited C•CURE 800 servers and 250,000 cardholders
- MS Windows 2003 support
- Intel Pentium IV processor support
- Allows C•CURE Central and C•CURE 800 to run on one physical machine
- Centralised photo image management
- Automated database recovery
- Improved systems diagnostics
- General Import Export Option (GIEO)
- Improved systems diagnostics

#### NOTE:

All C•CURE Certified integrators and dealers must complete training on C•CURE Central prior to purchase. Professional Services for Setup and installation must be included in quotation

Contact your local Tyco Fire and Security Representative for Product Codes.

## Communication Devices

### RS-232 to RS-485 Converter

#### Features

- Provides communication up to 1,200m
- Allows up to 16 apC's on a data line
- Required for systems with no LAN connection
- Requires 240Vac supply

Product Code	
To be advised	RS-232 to RS-485 converter. Connects to PC serial port for RS-485 comms line. Up to 1,200m with a maximum of 16 apC's

### Terminal Servers



#### Features

- LAN-attached serial port expansion
- 1, 4 or 8 Port options
- Selectable for RS-232, RS-422 or RS-485 protocols

Our range of Intelligent Ethernet Port Servers provides LAN-attached serial port expansion, and IP routing. They have been selected for systems that require management and control one to eight apC networks over LAN or Internet using standard protocols.

These devices use industry standard protocols to ensure open-systems connectivity and flexibility for your demanding applications.

The TRM3184 & TRM6008 are bundled with Systech's industry-leading NativeCOM port redirection software, web browser interface, and remote diagnostics. NativeCOM simplifies installation and support, and makes any LAN attached Systech serial port (whether local or remote) appear as local to your Windows application.

Product Codes	
TRM002	Lantronix UDS10 Device Server - Serial interface (RS-232, RS-422, RS-485), 10Base-T Ethernet, diagnostic LEDs, AC power adapter, CD-ROM with configuration tools and documentation, printed Quick Start Guide. Power is switchable 110/220.
TRM003	Lantronix UDS100-02 Device Server - Serial interface (RS-232, RS-422, RS-485), 10Base-T/100Base-T Ethernet, diagnostic LEDs, AC power adapter, CD-ROM with configuration tools and documentation, printed Quick Start Guide. Power is switchable 110/220. Replaces part # TRM001 and TRM485.
TRM3184	Systech Network Device Server RCS 3184. 4 DB9 serial ports –all RS-232,422, or 485 selectable/1 LAN port Includes NativeCom port redirector software and remote management software.
TRM-6008	Systech Network Device Server RCS 6008. 8 DB9 RS232/422/485 Serial Ports, 4-10Base-T, 1 LAN plus 3 Hub ports Includes NativeCom port redirector software and remote management software.

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TRM-6008	Systech Network Device Server RCS 6008. 8 DB9 RS232/422/485 Serial Ports, 4-10Base-T, 1 LAN plus 3 Hub ports Includes NativeCom port redirector software and remote management software.

## Controllers

### C•CURE 800 Hardware

**apC/L**  
2 Reader Controller



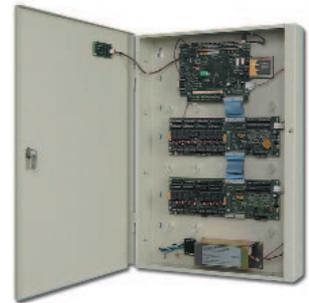
RS 232/485  
20,000 Cards  
Memory 512K  
Serial Comm

**apC/8X**  
8 Reader Controller



RS 232/485  
50,000 Cards  
Memory 1, 2, 4 M  
Serial Comm

**iSTAR Pro**  
8 / 16 Controller

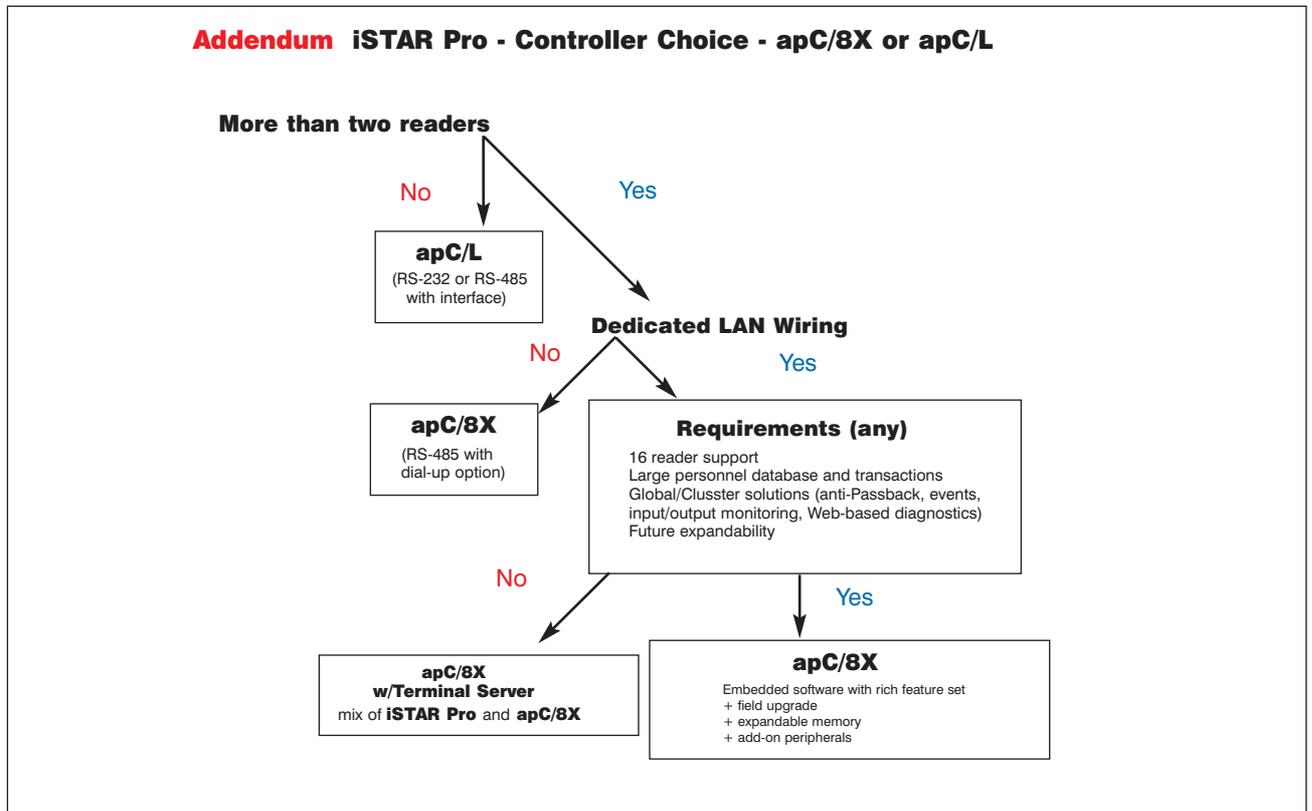


Ethernet TCP/IP  
DHCP Enabled  
300,000 Cards  
Memory 64 till 128 MB  
  
10 Base T, Redundant  
Communication Ports

C•CURE 800

Tyco Fire & Security has three Software House controllers in their C•CURE 800 range. These offer a wide range of connectivity and reader/door capabilities.

These controllers also provide door monitoring and local event management.



# apC®/L Advanced Processing Controller

C•CURE 800



### Features

- Fast, stand-alone processing
- 255 time commands for automatic input, output, and reader mode control
- Support for magnetic tape, Wiegand, and proximity card technologies
- Card, keypad, or card and keypad access support
- Reader-by-reader support for variable card formats, site codes, company codes, and card technologies

### apC/L Advanced Processing Controller

The apC/L is an intelligent access control and alarm monitoring control panel which serves as a basic building block for all of the C•CURE security management systems. It is a two-door version panel making it an economical solution for parking garages, small office buildings, retail outlets, and apartment complexes, or for remote site monitoring. Like the apC/8X, the apC/L has many innovative design features which make it more reliable, easier to service, and less expensive to own than other

2-door intelligent field panels.

Multiple card reader technologies and card formats can be used on the same apC/L. This makes it ideal for single and multiple tenant applications and for retrofitting existing systems. In addition, the bus architecture reduces wiring requirements and overall installation costs. The apC/L offers advanced technology, flexibility, and low cost of ownership.

#### apC/L Memory

The apC/L event storage capacity is automatically adjusted according to the memory required for storing cardholder information. Increasing the number of cardholder records stored decreases the number of events (transactions) that can be held.

Adding optional features may reduce the number of cardholder records and event storage space as the record size increases.

### Additional Benefits

- Dynamic memory allocation between card and events storage
- Communication between host and apC/L through network connection (via com or network ports) or dial-up mode
- Up to 80 hours onboard memory retention in case of power failure
- Integrated alarm control
- Battery backup option
- 2-wire supervised input capability with optional input modules
- Flash memory
- Internal activation and expiration dates for cardholders
- Real time full year clock and calendar

# Chapter 8 - Controllers

## apC/L Advanced Processing Controller cont'd

### Card to Transaction Storage

RAM SIZE	# of Cardholder Records	# of Events (Transactions)
512	15,000	12,200
	12,500	18,700
	10,000	25,200
	7,500	31,700
	5,000	38,200

### Configuration Options

Modules	Maximum Number Modules per Limit	Reader Ports	Readers	Inputs	Outputs
Standard apC/L	1	2 RS 485	2		2
Optional Modules Input Module	4			8 Class A Supervised	
Output Module	4				8
RM1Reader and RM-42	2			2 Class A Supervised	22

<sup>1</sup> Use Belden Part Number specified or equivalent product. <sup>2</sup> Not required if powered locally.

### Technical Specifications

Wall Transformer	230 VAC 60 Hz
Output	18 VAC at 3.3 Amp max
Power Consumption	Less than 10 Watts typical
Auxiliary Hardware	Relay contacts rated at 30 V AC/DC 1 Amp inductive, 2 Amps non-inductive
<b>Mechanical</b>	
Height	35.56 cm
Width	8.00 in. (20.32 cm)
Depth	8.26 cm
Weight apC/L	3.71 kg
Weight apC/L and Battery	5.40 kg
Housing	16 AWG metal wall mounted locking cabinet with tamper switches on door and rear
<b>Environmental</b>	
Operating	0° to 70°C
Storage	-25° to 85°C
Operating and Storage with Battery	0° to 50°C

### Product Codes

- |              |   |
|--------------|---|
| AS0101-003   | apC/L, 2 readers, 512K memory FLASH Memory. Need an external Power supply |
| AS0101-003MB | apC/L motherboard only, 512K Memory FLASH (spare)                         |

## apC®/8X Advanced Processing Controller



C•CURE 800

The apC/8X Advanced Processing Controllers are intelligent access control and alarm monitoring panels which serve as the basic building block for all Software House proprietary security management systems. Many innovative design features make the apC/8X more reliable, easier to service and less expensive to own than other intelligent field panels.

The apC/8X is available with up to 4MB static RAM and 4MB EPROM and flash ROM. The panel's CMOS static RAM consumes minimal power for data storage, allowing longer onboard memory preservation. The flash ROM makes firmware updates quick and easy.

The apC/8X supports optional add-on modules. The modular design along with its innovative firmware make the apC/8X a powerful and flexible platform for a wide variety of access control, alarm monitoring, and integrated security applications. Multiple card technologies and card formats can be used on the same apC/8X, making it ideal for single and multiple tenant applications and for retrofit of existing systems. The apC/8X bus architecture reduces wiring requirements and overall installation costs.

### Features

- Fast, stand-alone processing with flash ROM support
- Distributed database processing for up to 160,000 card holders with optional expansion
- 255 time commands for automatic input, output, and reader mode control
- Support for magnetic stripe, Wiegand, and proximity card technologies
- Card, keypad, or card and keypad access support
- Reader-by-reader support for variable card formats, site codes, company codes, and card technologies
- 2-wire supervised input capability

### Additional Benefits

- Elevator control
- Internal activation and expiration dates for cardholders
- Real time full-year clock and calendar
- Flash Memory
- Dynamic memory allocation between card and events storage
- Software-linked inputs and outputs for offline control
- Communication between host and apC/8X through direct connect or dial-up mode
- Up to 80 hours onboard memory retention in case of power failure
- Star, bus or combination star and bus reader configuration
- X.25, Ethernet, Token Ring support for specific configurations
- CE Compliant

### Configuration Options

	Module	Maximum Number of Modules per unit	Reader Ports	Readers	Inputs	Outputs
Standard	apC/8X	1	1RS-485	8 Bus	8 Class A Supervised	8
Optional	Star Coupler <sup>1</sup>	1		8 Star or Bus	8 Unsupervised	8
	WSPC <sup>1</sup>	1 (set of 2 modules)		8 Star	8 Class A Supervised	
	Mini Star Coupler <sup>1</sup>	1		8 Star or Bus		
	I/32	1				
	R/48	2				

# Chapter 8 - Controllers

## apC®/8X Controller cont'd

### Card record Size

Is a sum of cardholder information. Adding optional Software features, such as elevator control (10 Bytes), anti-passback (4bytes), activation and Expiration dates (4 bytes each), and 32-bit Card records increase the size of a Card record and reduce the maximum cardholder per Controller. Average of 26 Bytes.

### Card Holder Events Size

Events are the average number of events that an apC must store between uploads to the Host. A typical value is 1000. A calculation assume an event record memory of 10k bytes The values in this table are approximate. Your exact memory requirements depend on the number of cards and additional features in your system

If SRAM is	Number of Cardholders/No records with Elevator	Number Cardholders/records with one Elevator
1M	37,400	27,00
2M	77,000	56,000
4M	158,000	114,000

## Technical Specification

### Electrical Specifications

Autoranging input	90 to 260 VAC 47 to 440 Hz
Output	12 VDC at 3.3 Amp max.
Power Consumption	Less than 40 Watts typical (12W typical with 4 RMs, 18W with 8 RMs)
Auxiliary Hardware	Relay contacts rated at 30 V AC/DC 2.5 Amp inductive, 5 Amps non-inductive

### Mechanical

Height	61.60 cm
Width	41.91 cm
Depth	10.16 cm
Weight	apC/8X and power supply 10.49 kg apC/8X with Star Coupler Module and power supply 10.8 kg
Housing	16 AWG metal wall mounted cabinet with tamper switches on door and rear

### Environmental

Operating	0° to 70°C
Storage	-25° to 85°C

## Product Codes

### apC/8X Controller

AS0100-004	apC/8X 8 Readers 1 MB Memory, Flash ROM with Enclosure and power supply
AS0100-008	apC/8X 8 Readers 2 MB Memory, Flash ROM with Enclosure and power supply
AS0100-016	apC/8X 8 Readers 4 MB Memory, Flash ROM with Enclosure and power supply

### apC/8X without power supply

AS0100-004NPS	apc/8X 1 MB Flash, Enclosure, No power supply
AS0100-008NPS	apc/8X, 8 readers, 2MB Flash, Enclosure, No power supply
AS0100-004MB	apC/8X 1MB Panel motherboard only
FW-APC	Firmware Upgrade Kit for apC (current firmware) (EPROM)

### apC/8X Internal mountable extension boards

AS0015-00	apCI32, 32 supervised input module for dpC, apC
AS0016-00	apC/8X R48, 48 output relay board for dpC and apCAS0020-00 apC/8X Star Coupler module (8 readers, 8 in/8 out)
AS0020-01	apC/8X Mini-Star Coupler (8 readers)
AS0054-00	Wiegand/proximity Star Coupler base module
AS0054-01	Wiegand/proximity Star Couplerextension module (4 reader/4 input)

### apC/8X External extension boards

AS0060-00	apC/8X power supply with cable (spare)
AS0074-000	Eight output reader bus module
AS0073-000	Eight input reader bus module
RM4-I8-08-BOX	Integration box for 2 RM-4 , or 1 Input 8 board ,1 Output 8 board

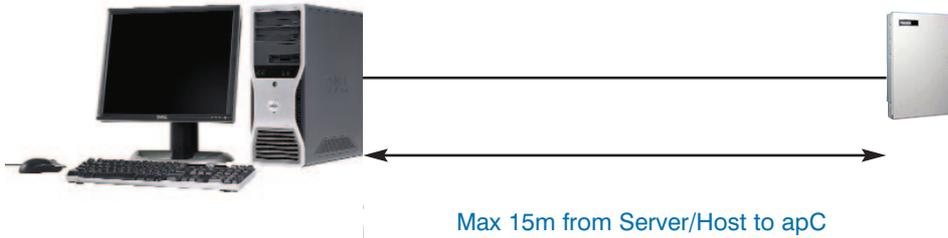
# Chapter 8 - Controllers

## apC Sample System Configurations

### RS-232 implementation

C•CURE 800 Server Host

One PC com port, one apC

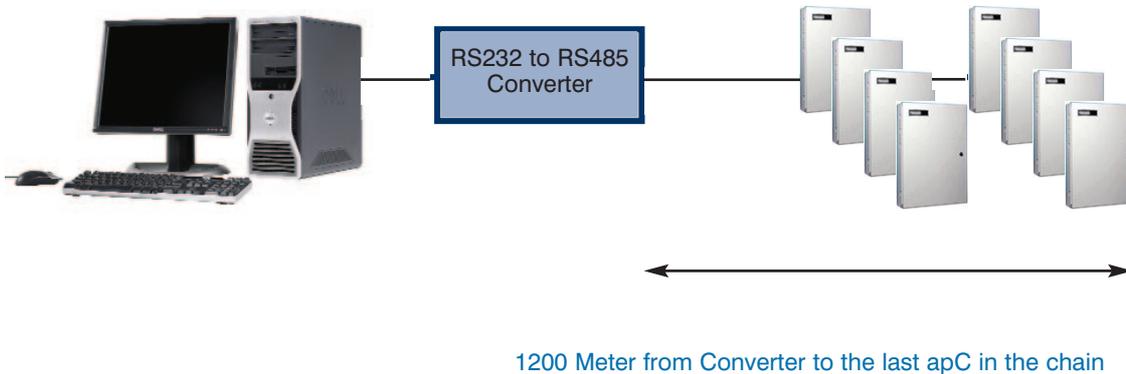


Limit 1000 apC's, consisting of a combination of RS-232, RS-485, Terminal Server, Dialup.

### RS-485 Implementation via RS-232 to RS485 Converter

C•CURE 800 Server Host

One PC com port, Up to 16 apC's in a chain.



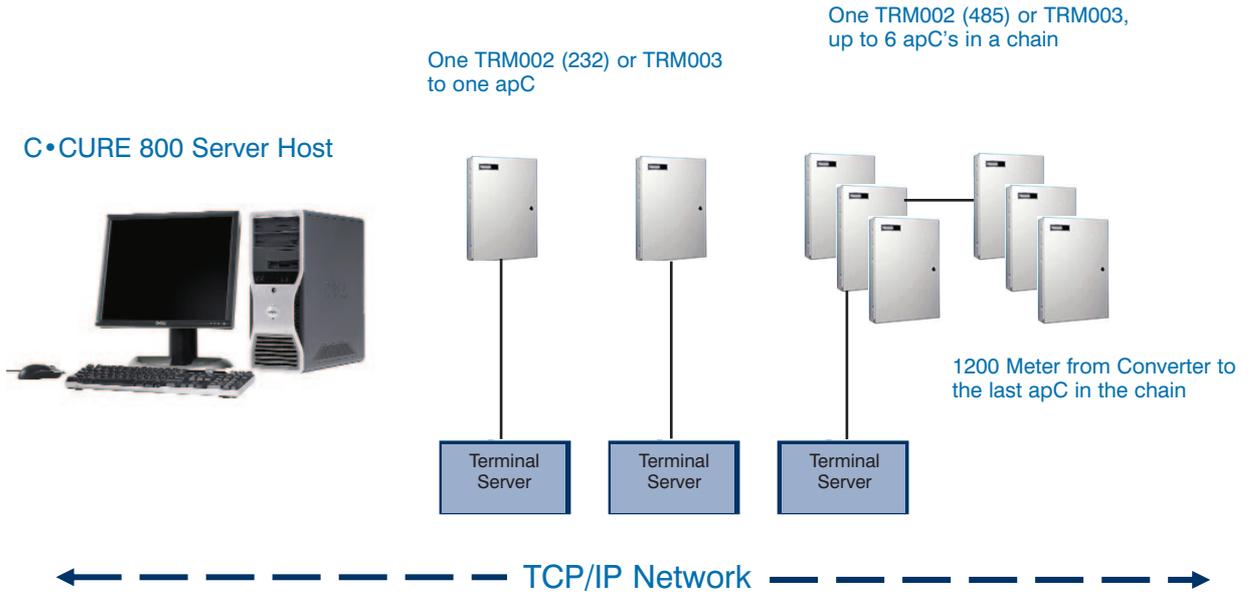
Although the interface supports 16 apC's in a chain it is usually best to use a practical limit of 8-10 depending on activity.

One PC com port, one apC. Limit 1000 apC's consisting of a combination of RS-232, RS-485, Terminal Server, Dialup. Max 15m from Server/Host to apC, RS232 to RS485 Converter. 1200 Meter from Converter to the last apC in the chain.

Although the interface supports 16 apC's in a chain, it is usually best to use a practical limit of 8-10 depending on activity. Once PC com port, Up to 16 apC's in a chain.

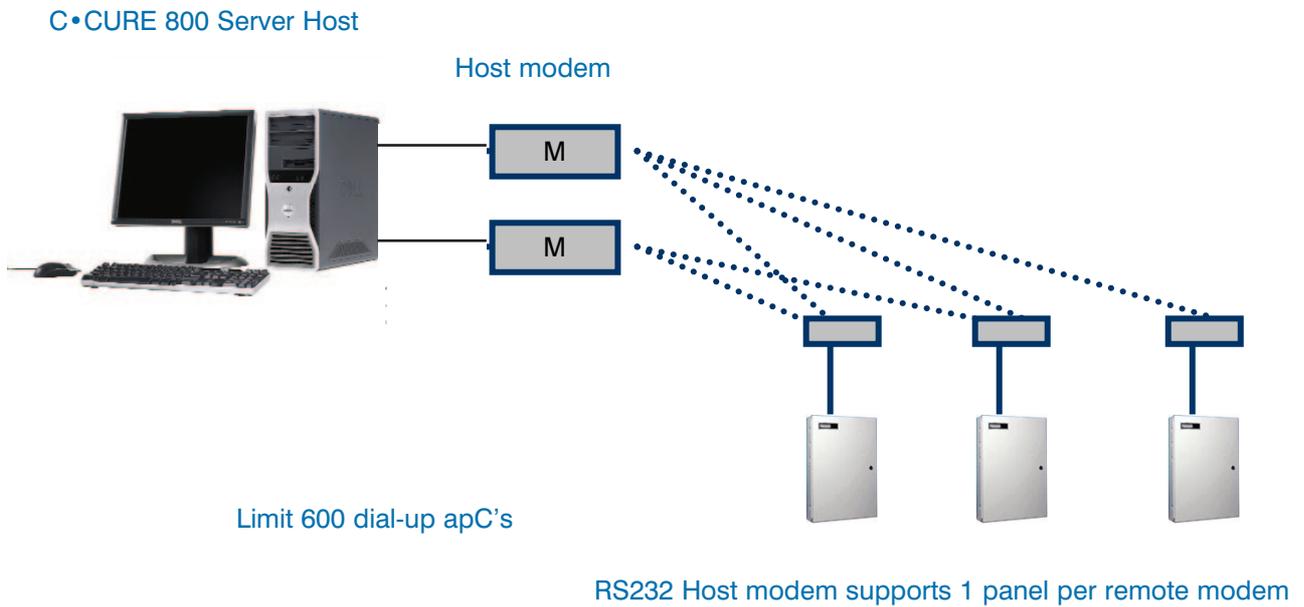
# Chapter 8 - Controllers

## Implementation via Lantronix Terminal Servers



C•CURE 800

## apC Dialup Implementation via Modem



- There is generally a practical limit of between 600-1000 apC panels per C•CURE 800 system, but the following limits also apply.
  - 255 Comm. Ports used on the C•CURE 800 server
  - A maximum of 600 dial-up panels
- RS232 Host modem supports 1 panel per remote modem

# iSTAR™ Pro Intelligent Network Controller



### Features

- Dual Network Failover Support/Redundant Communications
- Ethernet Ready
- Embedded Operating System
- Seamless Integration with C•CURE 800/8000
- Wide Range of Alarm Monitoring
- Advanced Clustering
- Global Anti-Passback within a Cluster
- Intrusion Zones & Keypad Commands
- Extended Card Number Support

### iSTAR™ Pro Intelligent Network Controller

iSTAR Pro is an Ethernet Ready embedded control panel for the enterprise-wide security management. iSTAR Pro builds on, and is fully compatible with, the successful iSTAR controller, while adding additional functionality and ease of installation and support.

iSTAR Pro operates with Software House's RM Reader Series as well as industry standard Wiegand interface readers. Full DHCP support allows the controller to easily fit into the LAN infrastructure, making it extremely IT-friendly. Two PCMCIA card slots allow support for connection to a second LAN or dial-up connection using standard modems.

iSTAR Pro is controlled by a General Control Module (GCM), which integrates a Motorola PowerPC processor with the MS Windows CE Operating System. The GCM contains a standard 64MB battery backed up memory, field expandable to 128M, two PCMCIA slots, alphanumeric LCD and DIP switches for configuration and diagnostics, as well as various network and serial communications ports.

The GCM controls up to two Access Control Modules (ACM) each supporting up to 8 Wiegand or RM readers as well as 16 supervised inputs and 8 output relays for door control.

Database event-directed actions can be downloaded to the controller from the C•CURE 800/8000 database and journal host. Peer to peer communications between clusters are supported via TCP/IP over Ethernet. Remote dial-up is also an option as a secondary back-up communications path. This advanced access control networking allows iSTAR controllers to efficiently communicate within the C•CURE system without host polling or intervention.

#### Additional Benefits:

- Ethernet Ready. iSTAR can be deployed in clusters and each cluster can incorporate multiple panels deployed over a WAN, allowing the cluster to include controllers in geographically disparate locations.
- Wide range of alarm monitoring. iSTAR supports 2 ACMs, each providing 16 supervised inputs and 8 relay outputs (readers); I/8 and R/8 allow additional input and output modules (Max 192 inputs and 176 outputs)
- Multiple Cards/Formats Support
- Supports up to 16 RM or Wiegand Readers
- Web Diagnostics, Secure Communications
- Easily Upgradable, Worldwide Compliance
- Instant Database Backup & Restore
- Two PCMCIA Slots
- Batteries on Board
- Advanced clustering for unmatched event control and monitoring. Distributed management is supported through communications within a cluster
- On board battery backup. Data retention allows instant recovery from power loss condition.
- Easy to install. iSTAR includes an alphanumeric LCD and DIP switches for configuration and diagnostics.
- Automatic failover support beyond dial-up. Two PCMCIA slots allows users to create support for a second secure LAN connection or dial-up connection for multiple redundancy.
- Cross Cluster Anti-Passback. Stops or restricts access of personnel attempting to utilise the same security badge
- Password-protected web based diagnostics. Users can obtain remote diagnostics utilising any networked computer, Web browser, and known iSTAR IP address.
- Expandable on-board memory. 64MB standard, field expandable to 128MB.
- Secure Communications. Industry tested encryption and multi-key authentication for enhanced security.
- System for the Future. Users can download enhancements over the network.
- Worldwide Compliance. FCC, CE, C-Tick, UL 294 and UL 1076

## iSTAR™ Pro cont'd

### Typical iSTAR Controller Capacity (Firmware v.3.3 or earlier)

iSTAR Pro type with number of Cards

64 MB iSTAR Pro (standard)	
Cards with 1 clearance . . . . .	500,000
Cards with 10 clearances. . . . .	295,000

### Typical iSTAR Controller Capacity (Firmware v4.0 or later)

iSTAR Pro type with number of personnel records†

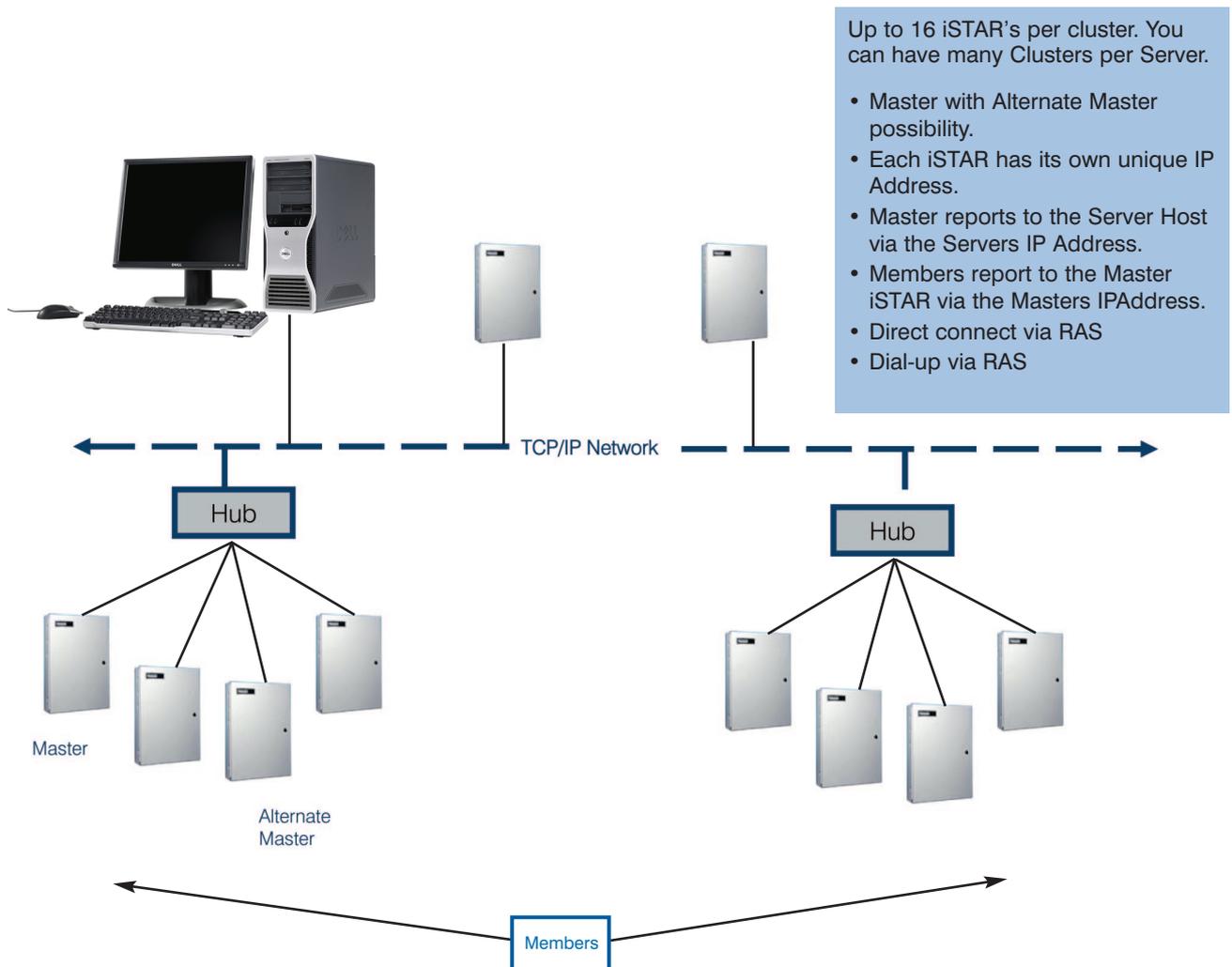
64 MB iSTAR Pro (standard) ††	
Personnel records with 1 clearance, 1 card/person, 10-digit cards . . . . .	525,000
Personnel records with 10 clearances, 1 card/person, 10-digit cards . . . . .	295,000
Personnel records with 1 clearance, 5 cards/person, 10-digit cards . . . . .	170,000
Personnel records with 10 clearances, 5 cards/ person, 40-digit cards . . . . .	110,000

Note: Memory allocation within iSTAR Pro is dynamic and shared between cardholders, event storage, and configuration information.

† To estimate how much space is needed for the personnel database in iSTAR Pro v4.0 for multiple cards and/or extended card capacity, please refer to the C•CURE 800 v9.0 README file located in the Member Center of [www.SoftwareHouse.com](http://www.SoftwareHouse.com).

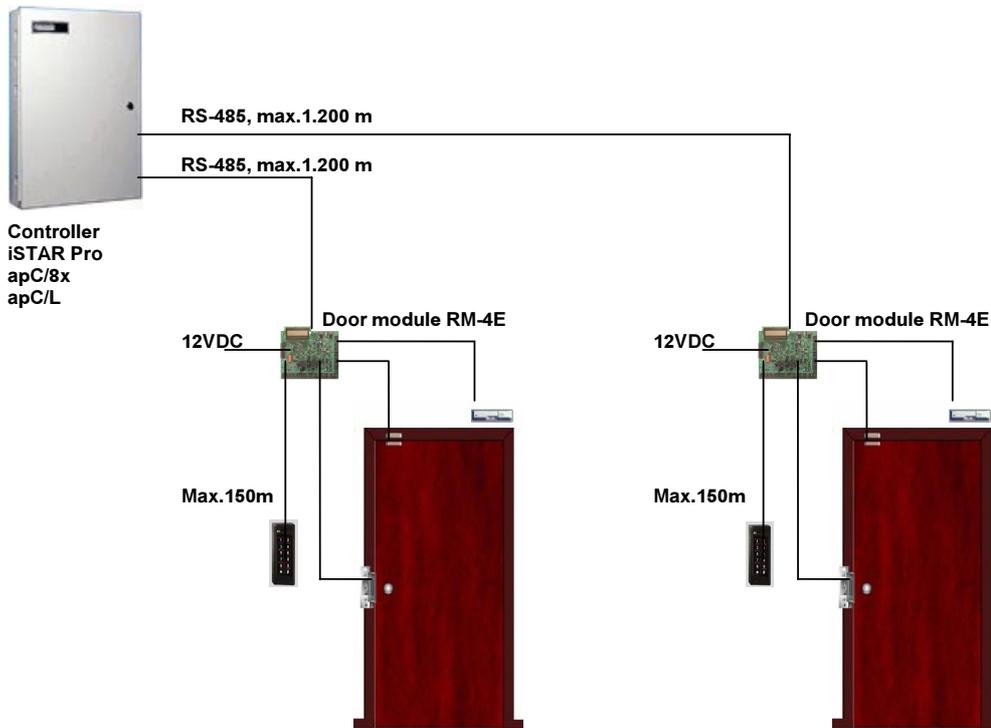
†† iSTAR can support up to 5 cards for each cardholder record; each card is independent of each car

### iSTAR Pro via TCP/IP Network



### Door Configurations

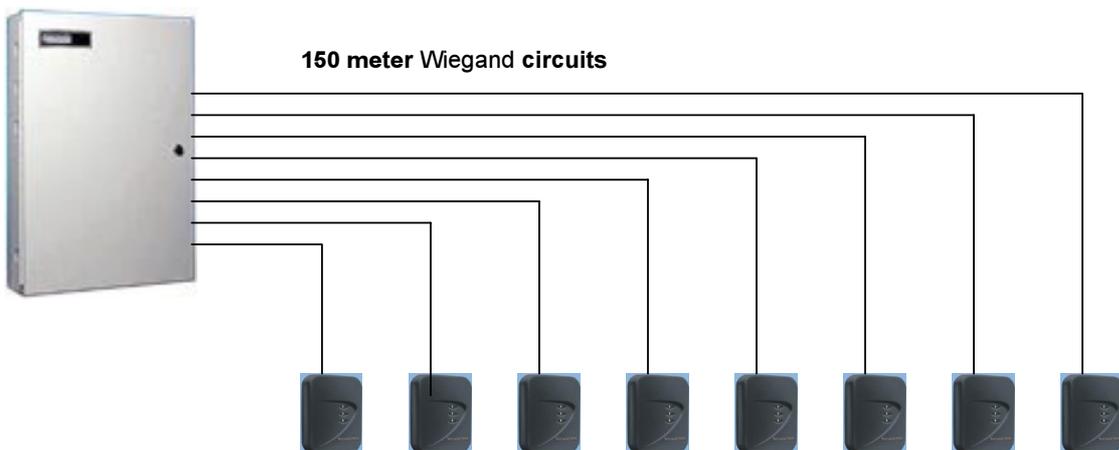
Reader connection with RS-485 Bus



Wiegand Configuration Internal

8 Wiegand readers / 16 Class A supervised inputs / 8 Form C 2.5A outputs

### iSTAR



# Chapter 8 - Controllers

## Technical Specifications

### Electrical

Power Input	90 to 240 VAC, 47 to 440 Hz, 0.5 A
Power Output	12 VDC at 3.3 A maximum
Auxiliary Hardware	Relay contacts rated at 30 V AC/DC 2.5 A inductive, 5.0 A non-inductive

### Mechanical

Dimensions (H x W x D)	61.6 x 41.9 x 10.2 cm (24.25 x 16.5 x 4.0 in)
Unit Weight	10.6 kg
Construction	16 AWG metal wall mounted locking cabinet with tamper switches on door and rear

### Regulatory

UL294, UL1076, CE, FCC

### Environmental

Operating Temperature	0° to 50°C 5 to 95% RH, non condensing
Storage Temperature	20° to 70°C Operating and Storage with Battery 0° to 50°C

## Product Codes

### iSTAR Pro Controller

#### Controllers - with Power Supply

STAR008W-64A	64 MB RAM General Controller Module II with one Access Control Module II for up to 8 readers (Wiegand or RM)
STAR016W-64A	64 MB RAM General Controller Module II with two Access Control Module II for up to 16 readers (Wiegand or RM)

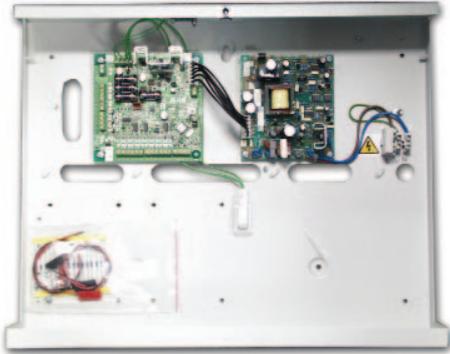
#### Accessories for iSTAR Pro Controllers

STAR008W-64ANPS	64 MB RAM General Controller Module II without power supply one Access Control Module II for up to 8 readers (Wiegand or RM)
STAR016W-64ANPS	64 MB RAM General Controller Module II without power supply two Access Control Module II for up to 16 readers (Wiegand or RM)

#### Boards

STAR-ACM8-WA	Add-on Access Control Module II (ACM II) Includes cable assembly and relay board for an additional 8 Wiegand or 8 RM readers. Each iSTAR Pro can support up to 2 ACM IIs.
STARGC-64MBA	General Controller Module II (GCM II) , with 64 MB RAM. Enclosure not included
STAR-PS	Replacement Power Supply, 12V – 60 Watt
KINM1169	KINM1169 Memory/128MB 133Mhz nECC SDRAM DIMM ,provides an additional 64MB or 128MB of memory for the data card. Please note that whether you use a 64-MB DIMM or a 128-MB DIMM, only 64MB of additional memory is available for cardholder data

## Battery Back Power Supplies



### Features

- Robust 1.2mm steel box, hinged lid a clam-shell design
- Comprehensive indication of battery, mains and fault status front and back tamper
- Overload protection 12 Volt Power supply Units, Standard and Cost effective range

### Battery Back Power Supplies

To provide local power and battery backed power supplies for both control equipment, readers and door locking.

We have included a range of 12Vdc power supplies and batteries.

Models from 1 to 3 Amps and compliant with EN50131-6 & EN60950. These range of metal boxes designed to provide flexibility for fitting of ancillary boards.

Engineer Friendly for easy installation and maintenance.

### Product Codes

#### Power Supply

859.001.005	1381N Power Supply Unit in Housing (200x230x80 mm), 12Vdc-1A, 230V +10%, 50- 60 Hz, 13.8Vdc Battery Charging with LED Indicators, Output ripple: 50mV rms max. Battery Size: 1x 7Ah 12V. Fuses: Internal mains, Load output battery.
859.001.007	1382M Power Supply Unit in Housing (330x335x80 mm), 12Vdc-2A, 230V +10%, 50- 60 Hz, 13.8Vdc Battery Charging with LED Indicators, Output ripple: 50mV rms max Battery Size: 1x 7Ah 12V. Fuses: Internal mains, Load output battery
859.001.010	1383N Power Supply Unit in Housing (330x355x80 mm), 12Vdc-3A, 230V +10%, 50- 60 Hz, 13.8Vdc Battery Charging with LED Indicators, Output ripple: 50mV rms max. Battery Size: 1x 7Ah 12V . Fuses: Internal mains, load output battery.

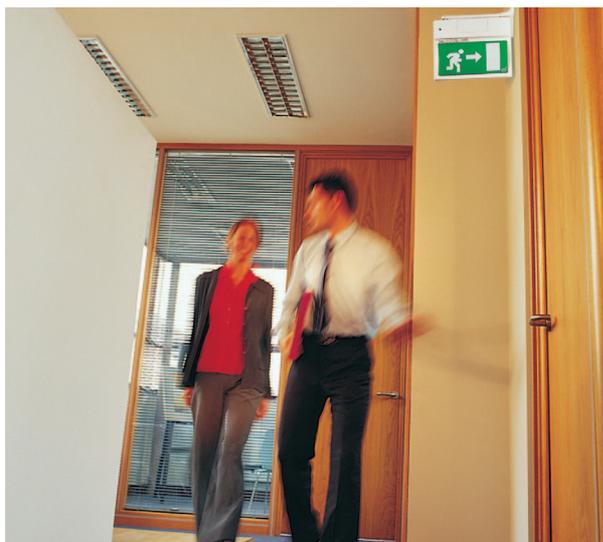
#### Battery

PS-1270	12 Volt DC, 7 Ah Battery, Power-Sonic Europe Ltd. PS-1270 - 12VOLT 7.0 ampere hour recharge-able sealed lead acid battery - VDS approved (supplied in box of 5)
PS-1242	12 Volt DC, 4,5 Ah Battery for apC/L (Cable 0650-1298-01 not Included) , Power-Sonic Europe Ltd PS-1242 - 12VOLT 4.5 ampere hour rechargeable sealed lead acid battery

We also have a 12Vdc 10Amp Power SUPPLY with 8 individual 1 Amp outputs with:-

- Robust steel enclosure with hinged lid
- Mains Indicator
- 8 individual 1Amp fused outputs

# Card Readers, Access Cards and Accessories



### Features

- Wide Choice of Technologies
- Suitable for Internal or External Applications
- Available with or without PIN
- Multi-Technology - Market Leaders

### Card Readers, Access Cards and Accessories

Software House offers a wide range of access control card readers and card reader accessories to work with its apC family and iSTAR access control devices.

The RM Series Cards Readers offer you a choice of three access control technologies - Proximity, Wiegand and magnetic Stripe using the same attractive housing.

This universal design lets you mix and match different technologies on the same system while maintaining an consistent appearance. RM Series readers come with three separate LEDs (red, green, amber), which indicate a range of conditions. An audible alert can also be set from the system host.

The readers also provide two supervised inputs and two outputs added to any RM Series reader for PIN use. Optionally, a backlit LCD display (RM2 Series) can be added to any RM Series Reader. The display shows the time, date, system conditions, and various user prompts (in English).

The RM Series Card Readers are compatible with existing apC/8Xs and MRM readers, although it may be necessary to upgrade the apC/8X firmware. All RM Series Readers use the same wire and connectors which simplifies installation and service.

Smart cards are more than collectible replacements of a wallet full of plastic cards. Unlike the read-only plastic card, the processing power of smart cards gives them the versatility needed to make payments, to configure your cell phones, and to increase secure access control with biometrics.

The Tyco Safety Product range presents an overview of smart card and its application focusing on the MIFARE® technology.

The C•CURE range of cardreaders provides next to the Standard HID and RM-Series readers a new innovative fully open, multi-protocol readers, including the industry's first Multi-Technology Reader to simultaneously read HID® Proximity cards, MIFARE® encrypted sector cards, HID iCLASS®, as well as other proximity and smart card formats.

## Software House Multi-Technology & Multi-Format Readers



### Features

- Software House Readers and Cards are priced competitively
- Protecting your existing card investment without having to re-badge
- Enabling the transition to smart card technology at your own pace
- Preventing the obsolescence of the reader - Future Proof - with the ability to flash new firmware

C•CURE 800

### Software House Multi-Tech & Multi-Format Readers

This new innovative product from Software House shows the companies commitment to open standards whilst providing the security industry with a transition from yesterday's proximity cards to today's smart cards.

The new line of Multi-Technology Readers is a leap forward in open systems, allowing companies to transition from a proximity system to a more advanced smart card system at their own pace – simply and affordably.

Software House's Multi-Format Proximity Readers can read 125 KHz card formats from multiple manufacturers, providing a cost-effective solution for businesses struggling with disparate proximity access control cards throughout the organisation.

The new line of Multi-Format Smart Card Readers offers enhanced security through encryption and is compatible with nearly every smart card format in the industry.

Before making any commitment to 3rd party card or reader compatibilities, we strongly advise that you arrange for the cards to be tested in advance. Some 3rd party manufacturers or distributors provide product that will not be 100% compatible with ISO norms and standards.

This means we cannot approve third party products without detailed testing. Please contact your pre-sales support representative.

### Additional Benefits

- Software House Multi-Format Proximity Readers
- HID 125 KHz
- Deister 125 KHz
- CASI-RUSCO® ProxLite
- Software House Multi-Format Smart Card Readers
- iCLASS® Serial Number
- MIFARE® Serial Number
- DESFire® Serial Number
- ISO 14443A Serial Number
- ISO 14443B Serial Number
- ISO 15693 Serial Number
- MIFARE® Sector

## Multi-Format Readers



### Features

- Reads Multiple 125 KHz Formats
- HID Proximity
- Deister Proximity
- CASI® ProxLite®
- Outdoor/Indoor Use
- Wiegand Output Format

The Multi-Format Proximity Readers are compatible with cards from multiple manufacturers which makes them an extremely versatile access control solution. The new Proximity readers combine multiple configuration options with an appealing, discreet design and economical price.

The Proximity readers are ideal for numerous applications. The readers potted electronics make them ideal for both indoor and outdoor applications.

### Technical Specifications

Agency Certifications	FCC Part 15, CE, UL 294 Full Outdoor (pending)
Minimum Wiring	4 Conductors
Cable Recommendations	22 AWG, Stranded
Colour	Black or Light Grey
Dimensions	
Model SWH-5000	120mm x 45mm x 25mm, Mullion
Model SWH-5100	84mm x 84mm x 28mm, Single Gang (Not in EMEA)
Operating Temperature	
Range	-35° to 67°C
Humidity Range	0 to 100%
Index of Protection	IP65
Power Supply	8 – 16 VDC 125 mA max @ 12 VDC
Read Range (Optimal)	from 7,5 cm (SWH-5000)
Read Time	Technology Dependent (typically < 300 msec)
Terminal Block	12 pos 3.5 mm Screw Terminals Plug-in

### Product Codes

<b>SWH-5000</b>	Software House black mullion style multi-format 125K prox reader. Reads HID, Casi Prox-Lite & Deister 125K prox. Gives a Wiegand output - can be configured by programming card
<b>SWH-5000G</b>	Software House grey mullion style multi-format 125K prox reader. Reads HID, Casi Prox-Lite & Deister 125K prox. Gives a Wiegand output - can be configured by programming card.

## Multi-Format Smart Card Readers



### Features

- Read multiple Smart Cards
- ISO 14443A
- DESFire®
- MIFARE
- ISO 14443B
- ISO 15693
- My-D®
- SLI-2
- iCLASS
- MIFARE® Sectors
- Configurable Wiegand Output
- Reads Unique Serial Number or Programmed Sector Data
- Two Wire RS485 ("Flexible readers")

Software House's Smart Card readers allow customers to combine the power of enhanced security with other critical business applications.

The Smart Card readers are ISO compliant and read serial numbers from the following card technologies: ISO 14443A (including DESFire®, MIFARE® serial number and sectors), ISO 14443B and ISO 15693 (including My-D®, SLI-2, iCLASS®, and many more), providing an incredibly versatile access control solution.

The Smart Card reader SWH-2100 is a "Flex" model that allows users to update the readers with new functionality or enhancements at any time with flash firmware. The "Flexible" readers save significant time and money by allowing users to simply "flash" new card protocols or formats directly to the reader.

"Flexible" versions also support the capability to read MIFARE® sectors. Software House's Smart Card readers are available in a wide variety of configurations and deliver a convenient, affordable smart card solution.

### Technical Specifications

Agency Certifications	FCC Part 15, CE, UL 294 Full Outdoor (pending)
Minimum Wiring	4 Conductors
Cable Recommendations	22 AWG, Stranded
Colour	Black or Light Grey
Dimensions	
Model SWH-2100EG	84mm x 84mm x 28mm, Single Gang
Environment	UL Listed for Interior or Exterior
Operating Temperature	
Range	-35° to 67°C
Humidity Range	0 to 100%
Index of Protection	IP65
Power Supply	8 – 16 VDC 125 mA max @ 12VDC
Read Range	
SWH-2100EG	Up to ~10 cm
Read Time	Technology Dependent (typically < 300 msec)

### Product Codes

<b>SWH-2100E</b>	Software House Smart Card Flex Reader Contactless smart card reader; reads 13.56 MHz serial number and MIFARE® sectors; single gang mount for Europe; Wiegand output; Flex version supports flashing new firmware; Light Grey.
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## Multi-Technology Readers



Software House's Multi-Technology Readers provide the industry's first single reader solution for reading serial numbers from multiple 13.56 MHz smart card technologies, MIFARE® encrypted sectors, and most common 125 KHz Prox cards, providing an incredibly versatile access control solution. This cost-effective solution enables customers to transition from proximity to smart cards over time or to utilise both smart cards and proximity cards in their facility.

The Multi-Technology Readers are available as a basic "Fixed" model or a "Flex" model that allows users to update the readers with new functionality or enhancements at any time with flash firmware.

*1 Reader continuously cycles between 125 KHz and 13.56 MHz and depending on the frequency cycle when card is presented, reader will either output the proximity card number or the unencrypted smart card serial number.*

## Features

- MIFARE® Sectors • Configurable Wiegand Output
- Reads Unique Serial Number or Programmed Sector Data
- Flexible version available allowing users to simply "flash" new card protocols or formats directly to the reader.

The "Flexible" readers save significant time and money by allowing users to simply "flash" new card protocols or formats directly to the reader. "Flexible" versions also support the capability to read MIFARE® sectors.

### Additional Benefits

- Read multiple Proximity Cards
- HID® 125 KHz
- Casi-Rusco ProxLite®
- Deister 125 KHz
- Read Multiple Smartcards
- ISO 14443A
- DESFire®
- MIFARE
- ISO 14443B, ISO 15693
- My-D®
- SLI-2
- iCLASS

## Technical Specifications

Agency Certifications (pending)	FCC Part 15, CE, UL 294 Full Outdoor
Minimum Wiring	4 Conductors
Cable Recommendations	22 AWG, Stranded
Colour	Black or Light Grey
<b>Dimensions</b>	
Model SWH-3000	120mm x 45mm x 25mm, Mullion
Model SWH-3100	84mm x 84mm x 28mm, Single Gang
Model SWH-4100	84mm x 84mm x 28mm, Single Gang
Model SWH-4200	84mm x 84mm x 28mm, Single Gang with Keypad (Not in EMEA)
Environment	UL Listed for Interior or Exterior
<b>Operating Temperature</b>	
Range	-35° to 67°C
Humidity Range	0 to 100%
Index of Protection	IP65
Power Supply	8 – 16 VDC 125 mA max @ 12 VDC
Read Range	Up to 10 cm depending on technology of card
Read Time	Technology Dependent (typically < 300 msec)

## Product Codes

SWH-3000	Black mullion style Multi-Technology 125K and smart card reader. Reads HID, Casi Prox-Lite & Deister 125K prox PLUS MIFARE serial, Desfire serial & iCLASS serial numbers. Gives a Wiegand output can be configured by programming card.
SWH-3000G	Grey mullion style Multi-Technology 125K and smart card reader. Reads HID, Casi Prox-Lite & Deister 125K prox PLUS MIFARE serial, Desfire serial & iCLASS serial numbers. Gives a Wiegand output - can be configured by programming card.
SWH-3100EG	Grey wall switch style Multi-Technology 125K and smart card reader. Reads HID, Casi Prox-Lite & Deister 125K prox PLUS MIFARE serial, Desfire serial & iCLASS serial numbers. Gives a Wiegand output - can be configured by programming card.
SWH-4100EG	Grey wall switch Multi-Technology Flex Reader Contactless smart card and proximity reader; reads 125KHz proximity cards, 13.56 MHz serial number, and MIFARE® sectors; single gang mount for Europe; Wiegand output; Flex version sup-ports flashing new firmware; Light Gray.

## Multi Tech/Multi Format Reader Feature Summary



### Features at a Glance

	HID PROX	Casi Prox-Lite	Deister Prox	14443 SN	14443 Mifare Sector	15693 SN	DesFire SN	iCLASS SN	Layout	Technology	Colour
SWH-5000	✓	✓	✓	x	x	x	x	x	Mullion Version	Prox	Black
SWH-2100EG	x	x	x	✓	✓	✓	✓	✓	Single Gang	Smart Sector	Grey
SWH-3000	✓	✓	✓	✓	x	✓	✓	✓	Mullion	Prox+Smart Serial #	Black
SWH-3000G	✓	✓	✓	✓	x	✓	✓	✓	Mullion	Prox+Smart Serial #	Grey
SWH-3100EG	✓	✓	✓	✓	x	✓	✓	✓	Single Gang	Prox+Smart Serial #	Grey
SWH-4100EG	✓	✓	✓	✓	✓	✓	✓	✓	Single Gang	Prox+Smart Sector	Grey

### Multi Tech/Multi Format Reader Accessories

Product Codes	
06225.000	AP5/2 spacer for European wallswitch reader - grey. Supplied with tamper
06223.000	AP5/2 spacer for European wallswitch reader - grey. No tamper
06213.000	FM5 bezel for European wallswitch reader - grey
06211.000	FM5 bezel for European wallswitch reader - black

# Chapter 10 - Cards & Readers

C•CURE 800

## MIFARE® Cards

Tyco Safety Products offers a complete line of access cards for use with its card reader products. Cards are offered with sequential numbering which is either hot-stamped onto the card or otherwise engraved when appropriate.

These attractive cards are offered with special pricing, and can be printed on the reverse side with your proprietary text message.

*Please contact your Area Sales manager*

### Product Codes

SWH-1ME	Non-programmed MIFARE Contactless Smart Card 1K Byte (8192 bits) with 16 sectors
SWH-1MC	Custom programmed, MIFARE Contactless Smart Card 1K Byte (8192 bits) with 16 sectors. Please contact your Product manager
SWH-4ME	Non-programmed MIFARE Contactless Smart Card 4K Byte with 40 sectors
SWH-4MC	Custom programmed MIFARE Contactless Smart Card 4K Byte with 40 sectors.
SWH-4DE	Non-programmed DESFire® Contactless Smart Card 4K Byte with 16 sectors and files per application.

## Software House MIFARE® Cards

Software House offers MIFARE access cards for use with its card reader products. Cards are offered with sequential numbering which is either hot-stamped onto the card or otherwise engraved when appropriate.

These cards have to be ordered with the Software House card order form.

### Product Codes

SWH-1MS	Software House standard programmed, MIFARE Contactless Smart Card 1 KB (8192 bits) with 16 sectors; 26-bit or 37-bit
SWH-4MS	Software House standard programmed MIFARE Contactless Smart Card 4 KB with 40 sectors; 26-bit or 37-bit
SWH-CCURE	Software House MIFARE C•CURE format uplift. Add to programmed card price. <i>Minimum order Qty 500 for custom artwork on all orders</i>
SWH-ART	Artwork Set-Up
SWH-ASC	Set-up per colour per slide
SWH-PCP	Per Card, Per Slide Printing (add to card price)

## Software House Program Card

### Product Codes

SWH-PGM-CRD	Program Card for Software House reader configuration. This card is created on demand for special reader configuration or customised MIFARE Sector definition. Please ask your Product Manager for more information
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## RM Series Card Readers



### Features

- Universal packaging accommodates magnetic stripe and proximity technologies
- Keypad and backlit LCD display
- 2 supervised inputs and 2 control point outputs
- Operates in Star or Multi-drop configuration
- Built-in tamper switch
- Readers electronics are coated against dust and moisture
- UL 294/1076, FCC, CE, C-Tick compliant

### RM Series Card Readers

The RM Series Card Readers offer you a choice technologies – For EMEA we support both Proximity and Magnetic Stripe.

This universal design lets you mix and match different technologies on the same system while maintaining a consistent appearance.

All RM Series readers come with three separate LEDs (red, green, amber), which indicate a range of conditions. An audible alert can also be set from the system host. The readers also provide two supervised inputs and two outputs. The RM Series also supports the ARM-1 relay module.

A keypad version (RM2 series) can also be provided for PIN use. Optionally, a backlit LCD display (RM2L Series) can be added to any RM Series Reader. The display shows the time, date, system conditions, and various user prompts (in English).

The RM Series Card Readers are compatible with existing apC/8Xs and MRM readers, although it may be necessary to upgrade the apC/8X firmware. All RM Series Readers use the same wire and connectors, which simplifies installation and service.

### Product Codes

#### Proximity Range

RM1-PH	Software House Proximity Reader HID Version
RM2-PH	Software House Proximity Reader HID Version with Keypad
RM2L-PH	Software House Proximity Reader HID Version with Keypad and LCD Display
RM3-PH	Software House Mullion Proximity Reader HID Version

#### Mag Stripe Range

RM1-MP	Standard Mag-Stripe Card Reader (Panasonic head)
RM2-MP	Standard Mag-Stripe Card Reader with Keypad
RM3-MP	Mullion Mag-Stripe Card Reader (Panasonic head)
RM2L-MP	Standard Mag-Stripe Card Reader with Keypad and LCD Display

## Software House Reader interface

When using non RM series readers, either Weigand boards must be included in the apC/8X or iSTAR or an RM-4 must be used. Then, standard Wiegand or clock and date readers can be connected to the system subject to the format being made available.

The range of RM-4 PCB's can be supplied at the door position and will require an enclosure. Where local lock power is to be used (at the door) then an ARM-1 relay module will be required for the lock power switching.

The range of HID Proximity or MR Access Mag stripe reader can then be connected to the C•CURE 800 range of controllers - system operation being subject to the card format in all cases.

*Note: An RM-4 board or RM Series reader MUST be used with the apC/L.*

Product Codes	
RM-4K	Series Personality Module with Keypad Cable Assembly with tamper switch. Requires ARM-1 relay for lock output (131-912)
RM-4	RM Series Personality Module with tamper switch and support for keypad data via Wiegand data stream. Requires ARM-1 relay for lock output (131-912)
RM-4E	Enhanced RM-4E has two additional door relays requires 12Vdc -280mA max (excluding lock & reader)

## Housing and other Accessories for Reader interface

Product Codes	
RM-DCM-2	Door Control Module includes RM-4E in a UL 294 Listed enclosure. Possibility to mount two I/O boards
RM-BAT	Optional battery - 12VDC for RM-DCM-2
RM-LCD	Optional LCD for RM-4E
RM4-18-08-BOX	Integration box for 2 RM-4., 1 I8 board, 1 O8 board.
130-915A	Heater kit less transformer for MRM/RM 220v applications
132-183	Security screwdriver for MRM/RM series readers
131-912	ARM - 1 auxiliary reader relay module for MRM/RM series readers
KT-0070-000	RM-4 connector kit (spare kit)

## HID Cards & Readers



### Features

- Standard Prox 125K Hz operating frequency
- Format Sizes available up to 84 bits
- Corporate 1000 available for Global Customers
- Read Ranges up to 60cm

### HID Cards and Readers

HID has become in many countries the generic name for 125KHz proximity cards and readers and is recognised as the industry standard for physical access control.

Featuring 125 KHz RFID technology HID prox products are robust, affordable, and seamlessly integrate with access control system.

HID 125KHz proximity readers are common throughout the range that is they are not formatted. The range of cards, tags & fobs on the other hand are formatted and this needs to be identified with each order.

*Tyco Fire & Security has generally use three formats:*

- H10301 – 26 bit Industry standard Wiegand
- H10304 – 37 bit Sensormatic Wiegand format
- S10701 – 37 bit Software House Wiegand Format

As you can see from the above there are two 37bit formats which have been supplied to 'Tyco Fire & Security' over the years. It is therefore essential when ordering cards for existing projects that the correct format is specified. For new projects requiring 37bit format we would recommend the use of the H10304 format.

All HID parts are now ordered direct from HID Europe. This allows Tyco Fire & Security to manage locally the card ordering database and benefit from the 'One Tyco Pricing' offered by HID.

### Reader & Tag Selection Chart

*Read Range Chart      Read range is also dependant on local installation conditions*

Card/ Reader	ProxPoint®	Plus MiniProx®	ThinLine® II	Prox Pro®	MaxiProx®
Prox Card® II Card	5.1- 7.6cm	10.2 - 14.0cm	10.2 -14.0cm	14.0 - 20.3cm	40.6 - 73.7cm
ISOProx ®II Card	3.8 - 6.35cm	7.6 - 12.7cm	7.6 - 12.7cm	10.2 - 17.8cm	38.1 - 50.8cm
DuoProx ®II Card	3.8 - 6.35cm	7.6 - 12.7cm	7.6 - 12.7cm	10.2 - 17.8cm	38.1 - 50.8cm
ProxKey® II Keyfob	2.5 - 3.8cm	2.5 - 5.1cm	2.5 - 5.1cm	2.5 - 7.6cm	15.2 - 43.2cm
MicroProx ® Tag	1.2 - 5.1cm	1.2 - 6.4cm	2.5 - 7.6cm	2.5 - 10.2cm	10.2 - 38cm

## ISOProx®II



### Features

- Combines proximity technology and offers photo identification capability on a single card
- Graphics quality surface for use with direct image printers
- Same size and thickness as a standard credit card
- Vertical or horizontal slot punch capability

The ISOProx II provides a solution for companies wishing to use proximity technology and Photo ID badging.

The card accepts either horizontal or vertical card punching (slot location identified on the card) and meets ISO standard thickness for use with direct card printers.

### Product Codes

1386LGGMN-H10301	HID:1386LGGMN-H10301 ISO Prox II programmed for 26 bit Wiegand. Front & Rear supplied in PVC plain white gloss finish. Card numbering matching - internal & external. NOT slot punched.
1386LGGMN-H10304	HID:1386LGGMN-H10304 ISO Prox II programmed for Software House 37 bit Wiegand. Front & Rear supplied in PVC plain white gloss finish. Card numbering matching - internal & external NOT slot punched.
1386LGGMN-S10701	HID:1386LGGMN-S10701 ISO Prox II programmed for Software House 37 bit Wiegand. Front & Rear supplied in PVC plain white gloss finish. Card numbering matching - internal & external. NOT slot punched.
1386LGSMN-H10301	HID:1386LGSMN-H10301 ISO Prox II programmed for 26 bit Wiegand. Front & Rear supplied in PVC plain white gloss finish (Back has standard HID ISO II artwork). Card numbering matching -internal & external. NOT slot punched.

## Duo Prox® II



## Features

- Combines proximity technology and offers photo identification capability on a single card
- Graphics quality surface for use with direct image printers
- Same size and thickness as a standard credit card
- Vertical or horizontal slot punch capability
- Magnetic stripe technology
- Thin enough to be used with standard swipe or insert readers

### Proven, Reliable Technology

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions, even when close to keys and coins.

### Thin

Can be carried with credit cards in a wallet or purse. Use with a strap and clip as a photo ID badge.

### Photo ID Compatible

Print directly to the card with a direct image or thermal transfer printer. Slot punch vertically or horizontally for easy use.

### Cross-reference

A cross-reference list correlating the external card number and the programmed ID number is provided for easy system administration.

### Security

Offers over 137 billion unique codes.

### Magnetic Stripe

Ready to be encoded by the customer (see card construction).

### Long Life

Passive, no-battery design allows an infinite number of reads.

### Durability

Strong, flexible and resistant to cracking and breaking.

## Product Codes

1336LGGMN-H10301	HID:1336LGGMN Format:H10301 DuoProx II Card programmed for 26 bit Wiegand. Plain White Vinyl with Matte finish. Base with moulded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1336LGGMN-H10304	HID:1336LGGMN Format:H10304 DuoProx II Card programmed for Software House 37 bit Wiegand. Plain White Vinyl with Matte finish. Base with molded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1336LGGMN-S10701	HID:1336LGGMN Format:S10701 DuoProx II Card programmed for Software House 37 bit Wiegand. Plain White Vinyl with Matte finish. Base with molded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1336LGGMV-S10701	HID:1336LGGMV Format:S10701 DuoProx II Card programmed for Software House 37 bit Wiegand. Front & back are plain white PVC with Gloss finish. Sequentially numbered - internal & external. With vertical slot punch.

## Prox Key®II



### Features

- Offers universal compatibility with all HID proximity readers
- Provides an external number for easy identification and control
- Can be placed on a key ring for convenient entry

#### Proven, Reliable Technology.

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions, even when close to keys and coins.

#### Small and Convenient

Can be carried with keys in pocket or handbag.

#### Cross-reference

A cross-reference list correlating the external card number and the programmed ID number is provided for easy system administration.

#### Security

Offers over 137 billion unique codes.

#### Long Life

Passive, no-battery design allows for an infinite number of reads.

#### Durability

ABS package is resistant to cracking and breaking.

### Product Codes

1346LSSM-H10301	HID:1346LSSM Format:H10301 ProxKey II keyfob programmed for 26 bit Wiegand. Supplied with HID logo on the front back is standard finish. Numbering is sequential internal & external
1346LSSM-H10304	HID:1346LSSM Format:H10304 ProxKey II keyfob programmed for Software House 37 bit Wiegand. Supplied with HID logo on the front back is standard finish. Numbering is sequential internal & external.
1346LSSM-S10701	HID:1346LSSM Format:S10701 ProxKey II keyfob programmed for Software House 37 bit Wiegand. Supplied with HID logo on the front back is standard finish. Numbering is sequential internal & external.

## MicroProx®



## Features

- The size of a coin, the Tag easily attaches to all non-metallic materials
- The Tag can be programmed in any HID proximity format, and is compatible with all HID proximity readers
- The Tag is RF-programmable for ease of encoding with HID's ProxProgrammer®
- Experience the convenience of proximity without the expense of rebadging

The MicroProx Tag provides the convenience of HID's proximity technology in a small disk-shaped transponder. Simply attach the adhesive-backed Tag to any non-metallic card or device, and you instantly have a proximity card!

With the MicroProx Tag you can:

- Seamlessly upgrade from Wiegand, magnetic stripe or barium ferrite technologies by simply adhering the Tag to your existing access card.

- Easily and cost-effectively turn a plastic ID badge or contact smart chip card into a proximity credential!
- Add proximity access control capability to users' cell phones, PDAs and other similar non-metallic devices

## Product Codes

391LKSMN-H10301	HID:1391LKSMN Format:H10301 MicroProx tag programmed for 26 bit Wiegand. Supplied in black finish with HID logo. Sequential internal/external numbering (inkjetted).
1391LKSMN-H10304	HID:1391LKSMN Format:H10304 MicroProx tag programmed for Software House 37 bit Wiegand. Supplied in black finish with HID logo. Sequential internal/external numbering (inkjetted).
1391LKSMN-S10701	HID:1391LKSMN Format:S10701 MicroProx tag programmed for Software House 37 bit Wiegand. Supplied in black finish with HID logo. Sequential internal/external numbering (inkjetted).

## HID Proximity and MIFARE® Card



### Features

- Ideal for companies that want to add smart card applications to an existing HID proximity technology access control system
- Supports all HID proximity card formats, including Corporate 1000
- 13.56 MHz operating frequency provides high-speed, reliable communications with high data integrity.
- MIFARE technology ensures high security (mutual authentication, data encryption, unique 32-bit serial number)
- Meets ISO standards for thickness; use with all direct image and thermal transfer printers.

The HID Proximity and MIFARE card combines contactless smart card technology with the benefits of HID's proven proximity technology. This card can be used for diverse applications such as access control, public transportation, road toll, park & ride, airline ticketing, customer loyalty and photo ID cards.

Read/write Functionality for Multi-functional Memory Applications Sixteen securely separated files (sectors), each protected by a set of two keys and programmable access conditions, allow complex applications and provide for future expansion. Each sector potentially represents a different application. Arithmetic functions are used for expanding the capabilities of the chip. Different keys can protect read/write operations in order to build key hierarchies in the system.

Security mechanisms such as mutual authentication and encryption are efficiently combined with fast processing and data communication, resulting in transition times of less than 100 milliseconds for a typical secure ticketing transaction.

#### Proven, Reliable Technology

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions, even when close to keys and coins.

#### Thin

Can be carried with credit cards in a wallet or purse. Use with a strap and clip as a photo ID badge.

#### Photo ID Compatible

Print directly to the card with a direct image or thermal transfer printer. Slot punch vertically for easy use.

### Product Codes

1431LGGMNN-H10301	HID:1431LGGMNN / Format:H10301 Proximity & MIFARE card. Prox encoded for 26 bit Wiegand - MIFARE chip unencoded. Front & back plain white PVC with Gloss finish. Sequentially numbered internally & externally (inkjetted) for the 125KHz. Card has printed location for slot punch position. MIFARE chip is unencoded.
1431LGGMNN-H10304	HID:1431LGGMNN / Format:H103041 Proximity & MIFARE card. Prox encoded for 37 bit Wiegand - MIFARE chip unencoded. Front & back plain white PVC with Gloss finish. Sequentially numbered internally & externally (inkjetted) for the 125KHz. Card has printed location for slot punch position. MIFARE chip is unencoded.
1431LGGMNN-S10701	HID:1431LGGMNN / Format:S10701 Proximity & MIFARE card. Prox encoded for 37 bit Wiegand - MIFARE chip unencoded. Front & back plain white PVC with Gloss finish. Sequentially numbered internally & externally (inkjetted) for the 125KHz. Card has printed location for slot punch position. MIFARE chip is unencoded.

## ProxCard II®



### Features

- Price competitive with all other card technologies
- Thin enough to carry in a wallet or purse
- Offers universal compatibility with all HID proximity readers
- Provides durable packaging and consistent read range
- Provides an external number for easy identification and control
- Supports formats up to 85 bits, with over 137 billion codes
- Custom pre-printed artwork available.
- A PVC overlay allows for on-site photo ID using most direct image printers

### Proven, Reliable Technology

Offers extremely consistent read range. Unaffected by body shielding or variable environmental conditions, even when close to keys and coins.

### Convenient To Use

Can fit into a wallet or purse. Use with a strap and clip as a photo ID badge.

### Cross-reference

A cross-reference list correlating the external card number and the programmed ID number is provided for easy system administration.

### Security

Offers over 137 billion unique codes.

### Long Life

Passive, no-battery design allows for an infinite number of reads.

### Durability

Strong, flexible and resistant to cracking and breaking.

## Product Codes

1326LMSMV-H10301	HID:1326LMSMV / Format:H10301 ProxCard II programmed for 26 bit Wiegand. Plain White Vinyl with Matte finish. Base with moulded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1326LMSMV-H10304	HID:1326LMSMV / Format:H10304 ProxCard II programmed for Software House 37 bit Weigand. Plain White Vinyl with Matte finish. Base with moulded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1326LMSMV-S10701	HID:1326LMSMV / Format:S10701 ProxCard II programmed for Software House 37 bit Wiegand. Plain White Vinyl with Matte finish. Base with moulded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1326LGSMV-S10701	HID:1326LGSMV / Format:S10701 ProxCard II programmed for Software House 37 bit Wiegand. Plain White PVC with Gloss finish. Base with molded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1326LGSMV-H10301	HID:1326LGSMV / Format:H10301 ProxCard II programmed for 26 bit Wiegand. Plain White PVC with Gloss finish. Base with molded HID logo.
1326LSSMV-H10301	HID:1326LSSMV / Format:H10301 ProxCard II programmed for 26 bit Wiegand. Plain White Vinyl with Matte finish. Base with molded HID logo. Sequentially numbered - internal & external. With vertical slot punch.
1326LSSMV-S10701	HID:1326LSSMV / Format:S10701 ProxCard II programmed for Software House 37 bit Wiegand. Plain ProxCard II Artwork - with Matte Finish. Base with molded HID logo. Sequentially numbered - internal & external. With vertical slot punch.

## MiniProx®



### Features

- Offers high reliability, consistent read-range and low power consumption in an easy-to install package
- Mounts directly onto metal with no change in read range performance
- Provides multi-colour LED, compatibility with all standard access control systems and internal or host control of LED and beeper
- Available with either pigtail or terminal strip (terminal strip only for Hazardous Location version)

**Mounting:** unobtrusive design mounts directly onto metal such as door mullions. Hazardous Location MiniProx reader **Mounting:** designed to mount onto a junction box included with each reader. The junction box is attached to an appropriate surface location utilising four holes.

**Audiovisual indication:** when a proximity card is presented to the reader, the red LED flashes green and the beeper sounds. The multi-colour LED and beeper can also be controlled individually by the host system.

**Diagnostics:** on reader power-up, an internal self-test routine checks and verifies the setup configuration, determines the internal or external control of the LED and beeper, and initialises reader operation.

An additional external loop-back test allows for the reader outputs and inputs to be verified without the use of additional test equipment.

**Indoor/outdoor design:** sealed in a rugged, weatherised polycarbonate enclosure designed to withstand harsh environments, providing reliable performance and a high degree of vandal resistance.

### Additional Benefits

- Potted Reader Suitable for indoor and outdoor use.
- Hazardous Location version is UL104 Class I & II DIV 2 and Class III listed.
- Power Requirements: 5 -16 VDC
- Current requirements 20mA avg/110mA peak at 12 VDC
- Classic Series covers available in black, grey, white or beige
- 18" (45cm) wire pigtail standard; consult factory for 9' (2.7m) pigtail available by special order

### Product Codes

5365CGP00	HID Miniprox in grey with 18" (45.7cm) Pigtail cable. Reader is configured with Beep on, LED normally red, reader flashes green on card read.
5365EGT00	HID Miniprox in grey with terminal strip. Reader is configured with Beep on, LED normally red, reader flashes green on card read.
5365EGH00	HID Miniprox in grey with hazardous area back box. Reader is configured with Beep on, LED normally red, reader flashes green on card read.

## ProxPro®



### Features

- Ideal for medium-range applications
- Sealed for indoor or outdoor use
- Optional glass mount kit available for mounting the reader behind glass
- Power requirements: 10-28.5 VDC
- Current requirements: 100mA avg/120mA peak
- Dimensions: 5.0" x 5.0" x 1.0" (12.7 x 12.7 x 2.54 cm)
- Affords high reliability, consistent read range characteristics, and low power consumption in a single, easy-to-install package

The ProxPro proximity card reader's weatherproof design and architecturally attractive enclosure allows easy mounting indoors or out. The ProxPro Reader is ideal for applications requiring a larger read range. Mounting: mounting holes fit standard U.S.A. single-gang switch boxes (vertically mounted) to simplify installation. Field adjustable for mounting directly to metal, exhibiting only minimal effects on read range.

A selectable jumper setting provides for improved performance. Audiovisual indication: when a proximity card is presented to the reader, the red LED flashes green and the beeper sounds. The multi-colour LED and beeper can also be controlled individually by the host system. Diagnostics: on reader power-up, an internal self-test routine checks and verifies the setup configuration, determines the internal or external control of the LED and beeper, and initialises the reader's operation.

An additional external loop-back test allows the reader outputs and inputs to be verified without the use of additional test equipment. Indoor/outdoor design: sealed in a rugged, weatherised polycarbonate enclosure designed to withstand harsh environments, providing reliable performance and a high degree of vandal resistance. Easily installed in any location, even with the optional keypad.

The unit includes a tamper switch to provide notification of reader tampering. Recognises card formats up to 84 bits, with over 137 billion unique codes. Keypad option: available with an optional, integrated weatherised keypad, which provides an additional level of security by allowing the use of a personal identification number (PIN). The keypad interfaces with the host system either by sending the keypad data over the data output lines, or via a direct connection to the host keypad interface.

### Additional Features

- Features multi-colour LED, internal or host control of the LED, and/or beeper and a beeper "off" switch for silent operation.
- Offers an optional, fully integrated personal identification number keypad for heightened security.
- Keypad data and card data can be sent on the same cable, or on a separate cable using 2 of 7 or 3 x 4 matrix.

### Product Codes

5355AGN00	HID ProxPro reader in grey - Wiegand output. Configured with Beep on, LED normally red, flashes green on card read.
5355AGK00	HID ProxPro reader in grey with Wiegand output and Wiegand 8 bit burst keypad. Configured with Beep on, LED normally red, flashes green on card read.
5355AGS00	HID ProxPro reader in grey with Wiegand output and 3 x 4 matrix keypad. Configured with Beep on, LED normally red, flashes green on card read.

## Prox Point Plus®



### Features

- Small sized, low cost reader features a beeper and multi-colour LED which can be host and/or locally controlled
- Potted reader suitable for indoor or outdoor use
- Power requirements: 5-16 VDC
- Current requirements: 20mA avg / 75mA peak at 12VDC
- 18" (45 cm) wire pigtail standard; consult factory for 9' (2.7 m) pigtail available by special order
- Beeper and multi-colour LED
- Can read HID cards with formats up to 85 bits
- Designed for mounting directly onto metal with no change in read range performance
- Compatible with all standard access control systems
- Includes multilingual installation manual

Mounting: unobtrusive design can be mounted directly onto metal such as door mullions. Audiovisual indication: when a proximity card is presented to the reader, the red LED flashes green and the beeper sounds. The multi-colour LED and beeper can also be controlled individually by the host system. Diagnostics: on reader power-up, an internal self-test routine checks and verifies the setup configuration, determines the internal or external control of the LED and beeper, and initialises reader operation.

An additional external loop-back test allows for the reader outputs and inputs to be verified without the use of additional test equipment. Indoor/outdoor design: sealed in a rugged, weatherised polycarbonate enclosure designed to withstand harsh environments, providing reliable performance and a high degree of vandal resistance.

Easily interfaced: Wiegand output model interfaces with all existing Wiegand protocol access control systems. Clock-and-Data (magnetic stripe) model interfaces with most systems that accept magnetic stripe readers.

### Product Code

6005BGB00      HID ProxPoint Plus in grey with 18" (45.7cm) pigtail cable. Reader is configured with Beep on, LED normally red, reader flashes green on.

## ThinLine II®



**Mounting:** mounts on a single-gang electrical box for easy installation. Mounts directly on metal with minimal impact on read range performance.

**Audiovisual indication:** a red LED flashes green and the beeper sounds when reader is presented with a proximity card. The multi-colour LED and beeper can also be controlled individually by the host system.

**Diagnostics:** on reader power-up, an internal self-test routine checks and verifies the setup configuration, determines the internal or external control of the LED and beeper and initialises reader operation.

## Features

- The size of most standard U.S. switch plates
- Potted reader suitable for indoor or outdoor use
- Power requirements: 5-16VDC
- Current requirements 20mA avg / 115mA peak at 12VDC
- Dimensions: 4.7" x 3.0" x 0.68" (11.9 x 7.6 x 1.7 cm) 18" (45 cm) wire pigtail standard; consult factory for 9' (2.7 m) pigtail available by special order
- Provides high reliability, consistent read range and low power consumption
- Features include multi-colour LED and internal control or host control of the LED and beeper
- Mounts directly on metal with minimal impact on the read range performance
- Includes multilingual installation manual

An additional external loop-back test allows for the reader outputs and inputs to be verified without the use of additional test equipment. Indoor/outdoor design: sealed in a rugged, weatherised polycarbonate enclosure designed to withstand harsh environments, providing reliable performance and a high degree of vandal resistance.

## Product Code

<b>5395CG100</b>	HID ThinLine reader in grey with Wiegand output. Configured with Beep on, LED normally red, flashes green on card read.
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## MaxiProx®



### Features

- Long read range distance (up to 8' with ProxPass®)
- Autotune allows read range to be maintained within four inches of metal
- "Parking hold" feature ensures accurate detection of vehicles in parking lanes
- Dimensions: 12.0" x 12.0" x 1.0" (30.5 x 30.5 x 2.54 cm)
- Power requirements: 12 or 24 VDC (configurable)
- Current requirements: 200mA avg /700 mA peak at 12VDC; 260mA avg /1.2A peak at 24 VDC

Mounting: mount on non-metallic surfaces for optimal read range performance. Audiovisual indication: when a proximity card is presented to the reader, the red LED flashes green and the beeper sounds. The multi-colour LED and beeper can also be controlled individually by the host system.

Indoor/outdoor design: sealed in a rugged, weatherised polycarbonate enclosure designed to withstand harsh environments as well as provide a high degree of vandal resistance for reliable performance anywhere.

Security: includes a tamper switch to provide electronic notification of reader tampering. Recognises card formats up to 85 bits.

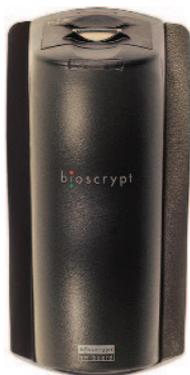
### Additional Benefits

- Compatible with all HID cards and tags with formats up to 85 bits
- Multi-colour LED with internal or host control of the LED and beeper
- Two MaxiProx units can operate one meter apart for "HI-LO" (truck and car) installations.

### Product Code

<b>5375AGN00</b>	HID MaxiProx reader in grey with Wiegand output. Configured with beep on, LED red, flashes green on card read. Read distance up to 8' with ProxPass.
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## Bioscrypt Biometric Reader



### Features

- Stand alone or networkable
- Biometric only or with card technology
- Biometric can be standard or smart card
- Duress Finger Option

Bioscrypt's V-Flex, V-Prox and V-Pass fingerprint readers provide unrivaled facility security and positive identity verification without compromising user convenience. Ideal for retrofits, the V-Flex adds a biometric layer of security to an existing external Wiegand reader or keypad.

The V-Prox offers a dual-factor solution that combines a self-contained fingerprint module and an HID proximity reader in one modern package. The V-Pass is an easy one-touch fingerprint identification reader for up to 200 users.

### Technical Information

	V-Flex	V-Prox	V-Pass
Dimensions:	Length 130 mm Width 50 mm Depth 65.5 mm	Length 130 mm Width 50 mm Depth 65.5 mm	Length 130 mm Width 50 mm Depth 65.5 mm
Communications	Pigtail wire connection for RS232, RS485, Wiegand IN/OUT. RJ11 aux port connection for RS 232.		
Algorithm type Verification	(1:1)		(1:n)
Enrollment time	3 seconds		
Verification time	1 second		3 seconds
Identification time			2 seconds
(EER) Equal Error Rate (FAR=FRR)	0.1%		
False Rejection Rate (FRR)	1.0%		
False Acceptance Rate (FAR)			0.2%
Adjustable FAR and FRR			
Number of Templates	4000 per unit		200 per unit, optimized for 100
Template Size	350 bytes		2400 bytes
Voltage	9 - 24 V DC		
Current Draw:	Idle 0.15 amps @ 12 V DC Max 0.50 amps @ 12 V DC		
Mounting:	Flat surface, single-gang or mullion mountable. Wall mount plate will accept #6 screws or bolts. Clearance hole diameter is 0.155". Trim plate included to cover single-gang box. Outdoor enclosure available Call for information		
Operating temperature	0 - 60°C		
Certifications	FCC, CE, UL294, cUL		

Product Codes		
	<b>V-FLEX</b>	V-Flex fingerprint scan only for use with another reader: Adds biometric verification to existing access control systems, Retrofit key pads, barcode and proximity card reader systems Self-contained unit stores 4000 fingerprint templates. Not standard product.
	<b>V-PROX-A</b>	V-Prox reader with Integrated HID Prox (26 bit). Adds value to existing proximity cards. Self-contained unit stores 4000 fingerprint templates. Verifies a user in less than 1 second. Not standard product.
	<b>V-PASS-A</b>	V-Pass reader standalone fingerprint reader. Eliminate cards, keys Identifies users in less than 1 second. Not standard product.
	<b>V-SMART-A-G</b>	V-Smart reader - with internal MIFARE Smart Card reader. Portable database. Fingerprint templates stored on cards and not on the reader. Unlimited users. Advanced Encryption. Not standard product.
	<b>V-SMART-A-H</b>	V-Smart reader with internal iCLASS smart card reader. Portable database – fingerprint templates stored on cards and not on the reader. Unlimited users. Advanced Encryption. Not standard product.
	<b>V-STATION-A-S</b>	V-Station terminal - finger scan only with keypad and LCD. Personalised LCD display and keypad. Stores up to 3000 templates on unit, audit log capacity for 7500 transactions. Ethernet, RS485, RS232, Wiegand communication. Not standard product.
	<b>V-STATION-A</b>	V-Station terminal - plus 1 to 200 fingerprint search option. Personalised LCD display and keypad. Stores up to 3000 templates on unit, audit log capacity for 7500 transactions. Ethernet, RS485, RS232, Wiegand communication. Not standard product.
	<b>V-STATION-A-P</b>	V-Station terminal - HID Prox reader; with keypad and LCD. Personalised LCD display and keypad. Stores up to 3000 templates on unit, audit log capacity for 7500 transactions. Ethernet, RS485, RS232, Wiegand communication. Not standard product.
	<b>V-STATION-A-H</b>	V-Station terminal HID iC:ASS reader with keypad and LCD. Personalised LCD display and keypad. Stores up to 3000 templates on unit, audit log capacity for 7500 transactions. Ethernet, RS485, RS232, Wiegand communication. Not standard product.
	<b>V-STATION-A-G</b>	V-Station terminal - MIFARE reader with keypad and LCD. Personalised LCD display and keypad. Stores up to 3000 templates on unit, audit log capacity for 7500 transactions. Ethernet, RS485, RS232, Wiegand communication. Not standard product.

## Bioscrypt Biometric Reference Guide

### V-Station™ Fingerprint Terminal with Keypad & LCD Display



- Personalised LCD display and keypad
- Stores up to 3,000 templates on unit, audit log capacity for 7500 transactions
- Ethernet, RS485, RS232, Wiegand communication
- Optional MIFARE®, iCLASS or built in Proximity card reader

### V-Pass™ One-Touch Fingerprint Identification



- Eliminate cards, keys and PINs
- Finger-only access
- Self-contained unit stores 200 templates
- Identifies users in less than 1 second

### V-Prox™ Dual Fingerprint and Proximity Card Reader



- Adds value to existing proximity cards
- Self-contained unit stores 4,000 fingerprint templates
- Integrated HID proximity card reader
- Verifies a user in less than 1 second

### V-Flex™ Fingerprint Security for Existing Wiegand Format Systems



- Adds biometric verification to existing access control systems
- Retrofit keypads, barcode and proximity card reader systems
- Self-contained unit stores 4,000 fingerprint templates

### V-Smart™ iCLASS™ & V-Smart MIFARE® Dual Fingerprint and Smart Card Reader



- Portable database - fingerprint templates stored on cards and not on the reader
- Unlimited users
- Advanced Encryption

### Outdoor Enclosure

#### ENC



- Protects your fingerprint readers from extreme weather conditions
- Options: heater/no heater, solid front or window option
- Fiberglass construction protects the reader from cold temperatures, blowing sand and rain
- Product operating range is 0° - 60°C (32° - 140°F)
- For colder climates, the enclosure with heating element is required

### V-CERCO-HT



- Motion sensor for hands free access
- Optional heater maintains temperature in cold environments
- Flexible mounting plates supports entire Veri-Series Line

General Specifications for all Veri-Series Readers

\* Pigtail wire connections for RS232, RS485 and Wiegand in/out

\* Administrative software included for no additional charge

\* Simple installation with screw mount at bottom of reader

## Hand Key II



The HandKey II from Recognition Systems, Inc. brings the true security and convenience of biometric technology easily within reach of most access control applications.

The HandKey II utilises field-proven hand geometry technology that maps and verifies the size and shape of a person's hand all in less than one second.

The benefits of biometric security were once reserved for high security applications, but the HandKey II changes that. Tens of thousands of HandKeys are already installed in applications that range from health clubs and day care centres to laboratories and prisons. Its ease of use and reliability have made the HandKey the biometric standard for the access control industry. The lower cost of the HandKey II now makes the choice even easier.

The HandKey II provides the security and convenience you need at a price you can afford, even when compared to card-based systems. Because your hand is your card, HandKey II allows access only to authorised people without the hassles of a card or key. By eliminating cards, you reduce administrative costs while greatly increasing the level of security. Users appreciate the convenience of never worrying about keeping track of a card or key. Stand-alone or fully integrated Systems can be as simple as one unit on the computer room door to hundreds of units networked together. The HandKey II's card reader

### Features

- Saves money over card-based systems
- Fast and easy to use
- Increases convenience by eliminating cards
- Integrates into existing systems
- Field proven reliable technology
- Door operation and monitoring
- Card reader
- Request for exit
- Tamper switch
- Memory expansion for 512 (standard) to 32,512 users
- RS232 printer output
- Stand alone or networked operation

emulation mode makes adding it to existing access control systems fast and easy. A variety of communications options, including dial-up modems and Ethernet, allows you to design a system that's right for your facilities.

In a network RSI's HandNet for Windows software links a virtually unlimited number of HandKey units into an integrated door access control system. All alarms and transactions report back in real time to the central computer, making door and alarm monitoring easy and efficient. Activity, user, and system reports can be easily generated. The central computer handles all hand template management automatically, allowing supervised enrollment at any reader and system-wide deletions. An optional internal modem lets you include remote site operations. Ethernet communication is also available.

### Additional Benefits

- Card reader emulation mode
- Integrated wall mount design
- Multiple auxiliary inputs and outputs
- 62 user definable time zones

### Hand Geometry Fast Facts Technology

Hand geometry is one of many forms of biometric identification. Biometric devices measure and analyse human characteristics for identification or verification purposes.

Hand geometry is not intrusive; it does NOT read fingerprints or palm prints. Hand geometry reads the size and shape of a person's hand.

Over 90 measurements of a hand's length, width, thickness and surface area are combined to form the digital 9-byte template. A hand typically takes less than 1 second to verify.

#### Security

Improvements in technology have made biometric identification far more reliable, practical and secure than other memory-based verification methods, such as passwords, PINs or proximity cards.

Biometrics is more reliable than smart cards, magnetic stripe cards or bar code badges alone, since biometric traits cannot be lost, stolen or duplicated.

Hand geometry can be paired with an employee ID number via the Hand Reader's keypad, resulting in a card-free solution.

#### Privacy

Most biometric devices are used for verification, not identification. (Verification is one to one; identification is one to many.)

Hand templates are stored as mathematical values that cannot be read by any other device or third party.

## Technical Specifications

Size:	22.3 cm wide 29.6 cm high 21.7 cm deep
Weight:	2.7 kg
Power:	12 to 24 VDC or 12 to 24 VAC 50-60 Hz, 7 watts
Environment :	Relative Humidity: 20% to 80% NC
Non operating (storage):	-10°C to 60°C
Relative Humidity:	5% to 85% NC
Verification Time:	Less than one second
Memory Retention:	Up to 5 years via the standard internal lithium battery.
Transaction Storage:	5120 transactions
ID Number Length:	1 to 10 digits from keypad or card
User Capacity:	512 users expandable to 32,512 users
Template Size:	9 bytes
Communications:	RS-485 (4 and 2 wire) RS-232 Serial Printer Support or network communications
Baud Rate:	300 to 28.8 Kbps
Card Reader Input:	Proximity, Wiegand, Magnetic Stripe, Bar Code (5 VDC provided by Hand Reader)
Card Reader Output:	Wiegand, Magnetic Stripe, Bar Code
Duress Code:	1 leading digit (user definable)
Door Controls:	Request to Exit input (switch or keypad),
Door Switch input:	1 on-board
Door Lock output:	(open collector, 5 VDC present, sinks to ground, 100 mA max)
Alarm Monitoring:	Tamper, Door Forced, Duress
Event Monitoring:	There are a variety of monitoring options including events such as: Invalid ID, Time Zone Violation, ID Refused, Try Again, Power Failure
Time Zones:	62 user definable time zones
Holidays:	Unlimited
Auxiliary Outputs:	3 user definable (open collector, 5VDC present, sinks to ground, 100mA max)
Auxiliary Inputs:	2 user definable (open collector, 5VDC present, sinks to ground, 100mA max)

## Product Codes



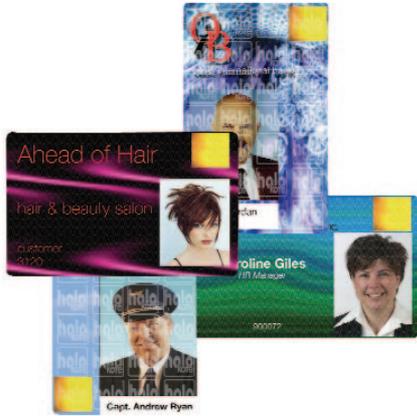
**HK-2** HANDKEY, HAND RECOGNITION READER. 512 USERS, Requires 16VAC/DC, 40VA transformer (Indoor use only).



**HK2-IP** HANDKEY, HAND RECOGNITION READER. 512 USERS, Requires 16VAC/DC, 40VA transformer with TCP/IP connection for networking (Indoor use only).

**EM-803** Memory expansion 32,512 users

## Access Control Ancillaries



### Features

- Enhance access control by recognising unauthorised people in secure areas
- Produce cards on-site. New starters have their ID on the same day
- Store images on the access control database for out of hours verification
- Produce visitor & contractor passes
- Store images on the access control database for out of hours verification
- Produce visitor & contractor passes which can be made active and inactive on your access system
- Personalise your access cards for company/club logo or slogan

### ID Badging

Having supplied an access control system to an end user, they may now wish to consider taking advantage of the ID software available for all of the Tyco Fire & Security range of access control solutions. This will allow you to print cards via software loaded onto their PC and enable them to locally manage an ID system for a site or office.

Each ID production system would include badging software & a card printer. They may already have staff photographs on a web site or have a digital camera to 'grab' the images. The ID printer can be connected to the access control PC and will allow them to produce cards for staff, temporary staff & visiting contractors. As well as cards which should be worn by authorised visitors etc. where and when - ID badging allows staff to identify anyone on site who is not authorised.

## ID Badging Camera and Accessories

In this section we offer a wide range of ID Badging solutions which allow the operator to capture, import, and display images from within the standard access control software.

The dedicated ID packages provide powerful photo imaging features such as user-friendly badge layout editor, support for multiple graphic formats, network retrieval of images and in some applications control of the ID cameras iris, and zoom capability.

### Digi Watchport USB Digital Camera



#### Features

- Microsoft Video for Windows & Twain scanner support
- Manual and Automatic gain & shutter control
- Automatic White Balance (AWB)
- Enhanced Resolution up to 1280 x 960

USB Digital camera with Enhanced resolution up to 1280 x 960, Microsoft Video for Windows and TWAIN scanner software support.

Manual and automatic gain and shutter control, automatic white balance (AWB), manual colour balance, colour saturation controls

#### Product Code

CC800-901-DIGI      USB Digital camera

### VA-3 USB Zoom Camera



#### Features

- Auto Focus 18:1 Option 20m
- Integrated USB 1.1 or 2.0 interface
- Fast image transfer to ID Badging Software
- High Intensity flash - captures from 48cm to 4.1m

VA-3 USB Zoom camera with full Optical Zoom control from the mouse or keyboard Powerful high intensity flash for perfect captures from 18 inches to 14 feet Flash directly integrated with camera, Integrated USB 1.1 or 2.0 interface Auto-Focus, 18 to 1 optical zoom (72 to 1 digital).

Full screen live display at 640 x 480 at 30 frames a second. Perfect captures anytime, anywhere even in completely dark rooms.

#### Product Code

CC800-VA3      VA-3 USB Zoom Camera

### Camera Stand



#### Features

- Attractive design
- Eliminates camera shake
- Sturdy construction

Camera Stand, SLIK , Tripod U2000, Max. operating height 1150mm, Length folded 480mm, Weight 950g

#### Product Code

CC800/CS      Camera Stand

## Ultra Magicard ID Printers

The UltraMagicard ID card printers are high performance printers at a very competitive price. Ultra Electronics Card Systems is one of the pioneers of ID card printing, having manufactured card printers since 1993.

Ultra Electronics Card Systems provides a quality product with enhanced card security features, and through providing the best support and warranty in the business.

Alto:



### Features

- Single-sided hand-fed printer
- 100 prints per dye film roll
- HoloKote card forgery protection
- Custom security text
- Magstripe

### Hand Fed Secure ID Card Printer

The smallest, lightest, and best value full colour professional dye-sublimation ID card printer. This compact, attractive design lends itself to use in company reception areas, and for hospitality applications. So small and light (only 3.2kg/7lb) it is easily portable.

Rio 2:



### Features

- Single-sided printer with hoppers
- 350 prints per dye film roll
- HoloKote card forgery protection
- Custom security logos and text
- Magstripe
- Proximity/contactless
- Contact chip

### Secure Single-Sided ID Card Printer

The industry work horse dye-sublimation printer. The high-security Rio 2 features fully-customisable HoloKote and HoloPatch security features. Built tough to withstand the hard work of high throughput jobs.

Tango 2:



### Features

- Double-sided printer with hoppers
- 300 double-sided prints per dye film roll
- HoloKote card forgery protection
- Custom security logos and text
- Magstripe encoding
- Proximity/contactless
- Contact chip

### Double-Sided Secure ID Card Printer

High-throughput and high security. The dye-sublimation Tango features fully-customisable HoloKote and HoloPatch card security features. Built tough to withstand the hard work of high throughput jobs.

## Ultra Magicard ID Printers cont'd

### Product codes

#### Ultra Electronic Rio Printer

	<p><b>M9006-749</b></p>	<p>M9006-749 Rio 2 Card Printer (single-sided printing) for ID-badging software. Around 20 seconds for Rio single sided. Double-sided colour, 40 seconds.</p>
	<p><b>M9005-751</b></p>	<p>Dye film type LC1/D YMCKO full colour (350 images).</p>
	<p><b>M9005-756</b></p>	<p>Dye film type LC6/D resin black / OP protective overcoat 1000 images).</p>
	<p><b>M9005-761</b></p>	<p>10 cleaning cards, 1 pen and 5 tacky cleaning rollers.</p>

### Product codes

#### Ultra Electronic Tango Printer

	<p><b>M9006-745</b></p>	<p>M9006-745 Tango 2 Card Printer (double-sided printing) for ID Badging Software.</p>
	<p><b>M9005-758</b></p>	<p>Dye film type LC8/D YMCKOK full colour for Tango (300 images).</p>
	<p><b>M9005-756</b></p>	<p>Dye film type LC6/D resin black / OP protective overcoat 1000 images).</p>
	<p><b>M9005-761</b></p>	<p>10 cleaning cards, 1 pen and 5 tacky cleaning rollers.</p>

# Chapter 11 - Access Control Ancillaries

## Ultra Magocard ID Printers cont'd

C•CURE 800

### Product codes

#### Ultra Electronic Alto Printer



**M9006-380**

Alto ID Card Printer Prints a full colour edge-to-edge image in 30 seconds. Prints a monochrome card in 6 seconds.



**PCF6**

PCF6 100 PVC cards in 2 dispensers + 100 shot YMCKO cassette.



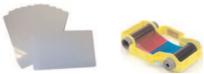
**CK1**

CK1 5 T cleaning cards + 1 pen.



**PCX-PF2**

PCX-PF2 100 shot cassette+2 card dispensers.



**PCF10**

PCF10 100 self adhesive cards + 100 shot PF2.



**M3610-054**

CR80 self adhesive cards (1000).

## Ultra Magicard ID Printers cont'd

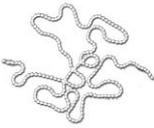
Technical Information			
	Alto	Rio 2/Tango 2	
Printing	Print technology	Dye sublimation	Dye sublimation
	Print speed	30 seconds Monochrome 6 seconds	20 seconds single sided 40 seconds double sided Monochrome 6 seconds
	Card thickness	0.51mm to 1.02mm (20 mil to 40 mil)	0.38mm to 1.6mm (15 mil to 63 mil)
	Card Capacity	Hand fed - 1 card at a time	100 card feed hopper, 50 card output stacker
	Image protection	Overlay	Overlay or optional in-line lamination
Consumables	Dye film cassettes, card dispensers and dye film rolls PCF6 : 100 PVC cards + 100 shot YMCKO dye film PCF7: 100 HiCo cards + 100 shot YMCKO dye film PCF8 : 100 HoloPatch cards + 100 shot YMCKO dye film PCF9 : 100 HiCo HoloPatch cards + 100 shot YMCKO dye film PF3 : 500 shot black dye film LC1 : 350 shot YMCKO dye film roll LC6 : 600 shot KO (black & overcoat) LC8 : 300 shot YMCKOK dye film roll (Tango 2 only) LC3 : 1,000 shot monochrome dye film roll in range of colours		
Security	Anti-card copying	Custom HoloKote (text only)	Custom HoloKote (text and logos)
	Visible security	HoloPatch	HoloPatch
Encoding	Magnetic stripe	Optional HiCo encoder ISO std. 7811	Optional HiCo encoder ISO std. 7811
	Smartcard encoder		Optional chip contact programming facility
	Prox. card (contactless)		Various contactless smart card options available
Printer	Printer interface	USB rev.1.1 (USB 2.0 compatible)	USB and parallel ports Ethernet optional
	Printer drivers	Windows 98, ME, 2000 XP drivers	Windows 98, ME, 2000 XP drivers
	Dimensions	Alto: 175mm W x 200mm H x 211mm D (6.9" W x 7.8" H x 8.3" D) Alto M: 175mm W x 200mm H x 261mm D (6.9" W x 7.8" H x 10.3" D) including return plate	Rio 2: 193.5mm W x 232.5mm H x 369.5mm D (7.6"W x 9.15"H x 14.55"D) including hopper and stacker Tango 2: 193.5mm W x 232.5mm H x 471.1mmD (7.6"W x 9.15"H x 18.58"D) including hopper and stacker
	Colour	Metallic silver/charcoal	Silver
	Cleaning	Easy cleaning cycle using externally fed 'T' card	Easy cleaning cycle using externally fed 'T' card + disposable roller
	Warranty	2 years UltraCoverPlus (EU & North America only)	2 years UltraCoverPlus (EU & North America only)

Operating Environment : Sheltered office environment 10° C to 30° C (50° F to 85° F) Safety : CE certified - UL listed (USA & Canada) EMC : EN50 081-1 and EN 50 082-1 (Europe), FCC pt 15 curve A (USA) & CSA 08.8 curve A (Canada)

## Access Control Card Accessories

These products have unique features to suit their application - to protect hospital staff; yo-yos keep staff's hands free; badge holders and chains prevent damage to expensive uniforms etc.

C•CURE 800

<b>Product codes</b>		
<b>ID Badging Solutions</b>		
	<b>637.001.001</b>	Rigid Plastic Card holder, Transparent, landscape holder which protects both the front and the back of the card.
	<b>637.001.002</b>	Soft Plastic Card holder type B vinyl Card pouch, Landscape IBM, credit or up to 86 x 70mm.
	<b>637.001.006</b>	SGA-CA6 Locking Clip, Lever-style strap clip with opaque strap and metal poppers. This superior clip incorporates a strengthening notch in the clip head. Suitable for use on smart clothing
	<b>637.001.007</b>	SGA-CA7 Neck bead Chain Light-duty necklace 710mm long with metal tub connector. Made of 6mm ball chain which will not harm skin or clothing. Suitable for use with proximity tags
	<b>637.001.008</b>	SGA-CP1 Card Slot Punch Simple, yet effective, manual slot punch allows users to cut out slots in badges to hold clips or chains. Standard slot size:14 x 3mm.
	<b>YOYO-5BK</b>	MINI YO-YO - BLACK Attach to person using belt clip: attach to card with reinforced loop clip. Colour - Black.

## Door Locking Devices

### Electric strike or electromagnetic lock on access controlled doors?

Locking and unlocking doors is the basic application of any access control system. The system remotely controls the lock to permit or deny access into an area.

The controlled doors may be secured all the time or only during user selected schedules. To do this, electrical locking devices are linked to the door controllers provided with the access control system.

The most common locking devices used in the access control industry are electric door strikes and Electromagnetic locks. To select which locking device should be used on a specific job, the installer must begin with an evaluation that will take into account not only the security requirements, but also the regulations imposed by local or national authorities having jurisdiction.

### Electric strikes

Because of potential regulations affecting the use of other devices, a door strike will generally be the most economical locking mechanism.

Always order electric strikes as: 1) fail locked (fail secure) which means the strike will be locked when you remove power; 2) 24VDC, 250ma max.; 3) continuous duty; these specifications correspond to the requirements of access control. Electric strikes are generally more difficult to install than Electromagnetic locks and the services of a competent locksmith may be required.

### Fire Rating

If the door strike is installed on a fire rated door, it may have to be approved for such use to maintain the fire rating of the door.

### Double Doors

On double doors, the door strike will be installed on the inactive door which should be bolted down. A door cord or electric-conductive hinge will carry the power of the strike.

### Special Situations

It may not be possible to install door strikes on special doors such as full glass doors. The only alternative may be to install an Electromagnetic lock.

### Electromagnetic Locks

When the exit must be controlled, it is necessary to provide a fail-safe device, such as an electromagnetic lock, that will keep the door locked not only on the entry side but also on the exit side of the door.

In the past, the installation of electromagnetic locks may have been considered to be less costly than the installation of door strikes. As a result, the market for electromagnetic locks has grown exponentially over the past few years. Unfortunately, a great number of electromagnetic lock installations were not done according to regulations and in some instances were actually jeopardising the safety of occupants. The proliferation of electromagnetic lock installations has caused great concern amongst safety regulators and, now, stringent local regulations and site inspections are common. This has caused a substantial increase in cost of using electromagnetic locks. Because of these extra costs, the use of electromagnetic locks may be more appropriate in situations where they are the only alternative, such as locking a controlled exit door.

### Regulations

National and local building codes and fire ordinances usually regulate the use of locking devices. One must remember that those are usually minimum requirements and that the local authorities may have the last word in interpretation and exceptions. Always check with local authorities before installing any locks. Once installed, it can be quite expensive to replace the locks and repair doors and door frames.

### Other Locking Devices

Mechanical devices (such as electric dead bolts) that prevent free exit are usually not permitted for use in access control applications. Check with local authorities.

### Simple rules for most cases:

#### Rule #1

For Free Exit doors, use electric strikes. Compliance with regulations is usually easier.

#### Rule #2

Add an electromagnetic lock if you want to prevent free exit or to control exit with a card reader or a keypad. Note that you want to add an electromagnetic lock and keep the door strike (to provide physical security) if, as a result of regulations, the electromagnetic lock must be deactivated during a fire alarm signal or building power failure.

#### Rule #3

Always check with local authorities having jurisdiction before installing any locks. Once installed, modifications of systems or removal of locks can be very expensive.

### Controlled entry and Free exit

A controlled door with 'Free Exit' means that a reader or keypad is installed outside the controlled areas identifying users as they come in but, no control is made during exit of the area.

### Controlled exit

A controlled exit door with 'Controlled Exit' means that readers or keypads are installed on both sides of the controlled door. The users are authorised on entry and exit of the area. Sometimes, the controlled exit is enforced only outside of normal work hours.

## Electric Releases



### Features

- Range to suit most latches
- Rim range to suit traditional nightlatches
- Fail safe or fail secure options
- Face plate for wooden or Aluminium frame
- Monitored or unmonitored options

There are a wide variety of locks and electric releases available for access control. In the main, there are three options available:

Surface or flush is simply the method of installing the lock. Your choice should take account of the aesthetics, security and type of door and frame. Fail-safe is a release that allows access when the power is removed from the operating coil. Fail safe locks therefore draw power from the access system when the door is in its closed state. Fail secure provides a degree of physical security when the lock has the power removed.

This could be either in its normal operation or in a total power failure, subject to the lock design. This type of installation offers a means of mechanical override for escape from the secure side of the door handle or if acceptable paddle turn and a mechanical override for entry by key. If this is not available then breakglass and keyswitch may be required as for the magnetic lock. Single or double monitored releases are available direct from the manufacturer.

## Shearlocks



### Features

- Aesthetically pleasing
- High holding face
- Surface or flush mounting
- Single or double action doors
- Monitored version available

These magnetic locks are designed for fitting into the transom or door frame of most aluminium, timber or steel doors. The magnetic force pulls the armature plate onto the locating pins providing a physical mechanism against the side shear force applied to the door.

These locks can be fitted to swing through doors but must re-align  $\pm 2\text{mm}$  laterally to re-lock. Surface mounted shearlock and glass door brackets are available direct from the manufacturers.

## Solenoid Bolt

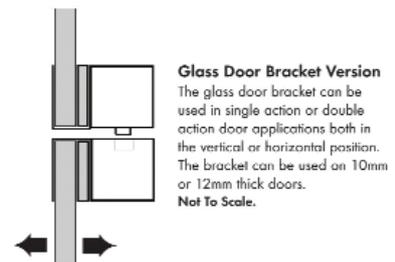
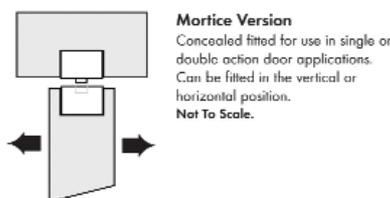
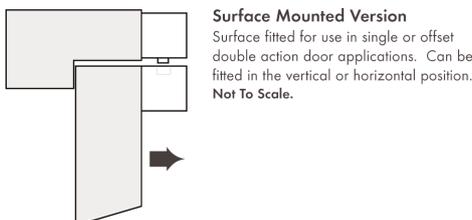


### Features

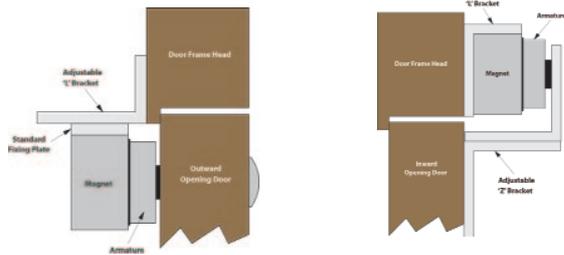
- Aesthetically pleasing
- High holding face
- Horizontal or Vertical Installations
- Fail surface or fail secure options
- Single or double action doors

The solenoid bolt can be fitted into the door and frame either vertically or horizontally.

The deadbolt has a 16mm throw. Suitable for single and double action doors (re-align  $\pm 4\text{mm}$  laterally).



## Magnetic Locks



### Features

- Monitored or Unmonitored options
- Range of brackets for inside/outside opening doors
- Mortice Lock & ironmongery available
- Range of holding faces available
- Fail safe design

These are now the most commonly used access control lock due to their ease of installation and tolerance to door deterioration. These locks are by their design 'FAIL-SAFE' units. This means that they require the power from the access system to provide a holding force. When the power is removed the lock releases. Should there be a total power failure, cable damage etc, the lock fails in a released state. The locks in this section are face to face style.

They hold by means of a coil in the lock producing a magnetic field, which attracts an armature plate, which is fitted to the door. The holding force is purely due to the magnetic field which is reliant upon the armature being in direct alignment with the magnetic coil.

The armature is fitted with a minor tolerance allowing for distortion etc. It is possible however to attack the door by "springing" the lock to gain entry - this is especially likely on large doors. As the lock requires a face to face fitting it is only suitable for doors that swing in one direction only. It is essential that these locks are not installed on the transom of swing-through doors and used as a doorstop as well as the lock. Options available include dry relay contacts in the lock detecting that the door is closed.

The installation of these locks is quite simple. They do however require there to be sufficient room on the door transom or for brackets to be fitted. On outward-opening doors, head height is lost and either 'L' brackets or a transom bar can be used. Be aware of Health & Safety issues for minimum door opening height. For inward opening doors, 'L' & 'Z' brackets are required.

As magnetic locks have no means of providing a mechanical override it is normal practice to supply an emergency break glass box adjacent to the door for means of escape. If this is not suitable an alternative means is to use a dummy monitored pushbar. It is also good practice to provide at least one door to each secure area with a means of overriding the system for emergency entry. This would normally be achieved by a secure keyswitch on the unsecure side of the door. This should be wired into the system in line with the lock power. This is of course a security risk so it must be installed in the correct manner.

### Product codes



**637.008.401** 261-000 Non-Monitored Single Magnet 12 or 24V DC (Nominal 480mA@12v DC.) for internal Door Up to 250KG Holding force

**637.008.402** 261-005 Monitored Single Magnet 12 or 24V DC (Nominal 480mA@12v DC.) for internal Door Up to 250KG Holding force



**637.008.403** 261-200 Non-Monitored Double magnet 12 or 24V DC for internal door up to ( 250KG X 2) Holding Force (Nominal 1 Amp@12v DC)

**637.008.404** 261-205 Monitored Double magnet 12 or 24V DC for internal door up to (250KG X 2) Holding Force (Nominal 1 Amp@12v DC)

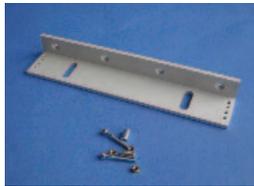
### Product Codes



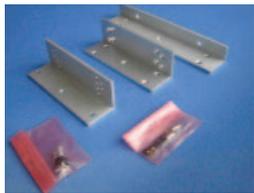
- 637.008.406** 281-000 Non-Monitored Single magnet 12 or 24V DC for internal door up to 510KG Holding Force (Nominal 480mA@12v DC)
- 637.008.407** 281-005 Monitored Single magnet 12 or 24V DC for internal door up to 510KG Holding Force (Nominal 480mA@12v DC)



- 637.008.405** 262-005 Monitored Mortice Magnet 12 or 24 V DC(480mA@12V) for internal doors - up to 250KG Holding Force



- 637.008.451** L Bracket for outward opening doors.for the 250 KG Electro-magnet. (Double magnets require Two)



- 637.008.452** Z & L Bracket for inward opening doors. For 250Kg range magnets (Double magnets require Two)



- 637.008.453** L Bracket for 510Kg Magnets. To be used on outward opening doors (Double magnets require two sets)



- 637.008.454** Z & L Bracket set for 510Kg Magnets on inward opening doors (Double magnets require Two)



- 637.008.455** Double 2 Meter transom Housing for 2 Mortice magnets

## Current Firmware Table for C.CURE 800/8000

(Refer to C.CURE 1 Plus Section for apC/C.Cure 1 Plus compatibility)

C•CURE 800/8000 Version	apC	apC/L	apC/L Flash	apC/8X	apC/8X Flash	iSTAR version	iSTAR Pro version
V3.20	7.4Y	10.4Y	10.4Y	8.4Y	8.4Y	NA	NA
V3.X with dialup	7.7F	10.7F	10.7F	8.7F	8.7F	NA	NA
V3.x with RM LCD Messages	7.7F	10.7F	10.7F	8.7F	8.7F	NA	NA
V3.X with elevators	7.7F	10.7F	10.7F	8.7F	8.7F	NA	NA
V4.X	7.7F	10.7F	10.7F	8.7F	8.7F	NA	NA
V5.0	7.7F	10.7F	10.7F	8.7F	8.7F	1.2	NA
V5.1.1	7.7H <sup>1</sup>	10.7H <sup>1</sup>	10.7H <sup>1</sup>	8.7H <sup>1</sup>	8.7H <sup>1</sup>	1.2.1 <sup>2</sup>	NA
V5.2.0	7.7H	10.7H	10.7H	8.7H	8.7H	1.3.0	NA
V6.0.1	7.7H	10.7H	10.7H	8.7H	8.7H	1.3.0	NA
V7.0.1	7.7M	10.7M	10.7M	8.7M	8.7M	2.0	NA
V7.1.0	7.7N	10.7N	10.7N	8.7N	8.7N	2.1	NA
V7.2.0	7.7P	10.7P	10.7P	8.7P	8.7P	2.2	NA
V8.0	7.7R	10.7R	10.7R	8.7R	8.7R	3.0	NA
V8.1	7.7S	10.7S	10.7S	8.7S	8.7S	3.1	NA
V8.2	7.7U	10.7U	10.7U	8.7U	8.7U	3.2	3.2
V8.3	7.7V	10.7V	10.7V	8.7V	8.7V	3.3	3.3

For a list of available patches, please contact Technical Support at (781) 466-6660. Patches are available to customers with current Software Support Agreements.

<sup>1</sup>Supports all C•CURE 800/8000 Versions (v.3.0+)

<sup>2</sup>Supports by C•CURE 800/8000 v5.x+

# SOFTWARE HOUSE



**Date**

To Whom It May Concern  
Company Address

Subject: Special Circumstances for C·CURE 800 Licensing

Reason: Cold Redundancy

Requirement: Provide a Cold standby redundant capability to an existing C·CURE 800 installation. The solution is a second sentinel and copy of the Software

The intent is to allow C·CURE 800/8000 users to have the option of a second server computer fully configured and available to take-over for the primary server's operations in the event of a catastrophic failure with the primary C·CURE 800/8000 Security Management software and/or hardware.

The duplicate sentinels are not to be used in conjunction with each other, specifically, both the primary and secondary systems operating in a simultaneous mode of operation. The only exception shall be to allow for data transfers for the purpose of updating the cold back-up computer's database.

New System set to expire on: \_\_\_\_\_

The customer, the dealers, authorization of this document shall constitute an agreement to the terms outlined in this document.

Current Site Serial Number: \_\_\_\_\_

Location of Storage of Software and Sentinel: \_\_\_\_\_

Signatures:

Software House: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Dealer/Installer: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

C·CURE 800

## Controller comparison chart

<b>iSTAR™ Pro</b>	<b>apC®/8X</b>
<ul style="list-style-type: none"> <li>• Embedded Ethernet – DHCP support for automatically obtaining IP addresses</li> <li>• Supports redundant communications paths – dialup, serial (utilising RAS) or Ethernet</li> </ul>	<ul style="list-style-type: none"> <li>• For Ethernet integration, optional terminal server available for networking</li> <li>• Serial and dialup communication support</li> </ul>
<ul style="list-style-type: none"> <li>• Peer-to-peer with master/slave designations (advanced clustering)</li> <li>• Global anti-passback support</li> <li>• Asynchronous communication with the host</li> </ul>	<ul style="list-style-type: none"> <li>• Client/server host dependent</li> <li>• Local anti-passback support (all readers must be on same apC)</li> <li>• Synchronous communication with the host</li> </ul>
<ul style="list-style-type: none"> <li>• 64 MB RAM standard</li> <li>• Field upgradeable to 128MB using industry standard DIMM module.</li> </ul>	<ul style="list-style-type: none"> <li>• 4 MB RAM maximum (factory upgradeable)</li> </ul>
<ul style="list-style-type: none"> <li>• 8 to 16 reader support</li> </ul>	<ul style="list-style-type: none"> <li>• 8 reader support</li> </ul>
<ul style="list-style-type: none"> <li>• Max. 192 inputs (all supervised), 176 outputs per controller</li> </ul>	<ul style="list-style-type: none"> <li>• Max. 128 inputs (of which, 120 are supervised), 192 outputs per panel</li> </ul>
<ul style="list-style-type: none"> <li>• Configuration set up and diagnostics via a web browser on any LAN networked computer</li> <li>• LCD for diagnostics and configuration support.</li> </ul>	<ul style="list-style-type: none"> <li>• apC diagnostic tool via serial connection</li> </ul>
<ul style="list-style-type: none"> <li>• PCMCIA Card add-on peripherals*</li> </ul>	<ul style="list-style-type: none"> <li>• External modem optional</li> </ul>
<ul style="list-style-type: none"> <li>• Automatic fall back to dialup communications if network goes down (C·CURE 800/8000 v5.2 or higher required for automatic fallback to dialup communications.)</li> </ul>	<ul style="list-style-type: none"> <li>• No automatic fall back to dialup communications</li> </ul>
<ul style="list-style-type: none"> <li>• Enhanced Intrusion Zones and Keypad Commands</li> </ul>	<ul style="list-style-type: none"> <li>• No Intrusion Zones or Keypad Commands</li> </ul>
<ul style="list-style-type: none"> <li>• No Asset management</li> </ul>	<ul style="list-style-type: none"> <li>• Asset management</li> </ul>

## Power Consumption Chart

### Current Draw at 12VDC\*

<b>Panels and Boards</b>	
iSTAR GCM boards	290mA
iSTAR ACM boards	180mA
RM4 board	75mA
RM4-E board	175mA without LCD
iSTAR Relay Board	35mA
I/8 option board	150mA
R/8 option board	150 mA (no active relays – add 17mA per active relay)
apC/L	120mA
apC/8X	120mA
Star Coupler	80mA (no active relays – add 17mA per active relay)
Mini Star Coupler	40mA
R/48	60mA (no active relays – add 17mA per active relay)
I/32	310mA
MRM	140mA
WPSC lower	60mA
WPSC upper	70mA
RM1-IC	160 mA
RM2-IC	160 mA
RM2L-IC	225 mA
<b>Readers</b>	
Software House Readers	125mA
Indala ASR-101, 103, 105, 110, 112	150mA
Indala PR5, 10, 12	130mA
Indala ASR-120, 122	350mA
Indala PR20, 22	350mA
Sensor Eng WR1, WR2	30mA
HID MiniProx	60mA
HID ProxPro	100mA
HID MaxiProx	200mA
Barantec	150mA
HID iCLASS	100mA
RM with Mag Stripe	80mA
RM with Mag Stripe with LCD	180mA
RM with Mag Stripe Mullion	80mA
RM with Indala Proximity	80mA
RM with Indala Proximity with LCD	180mA
RM with HID Proximity	135mA (avg); 250mA (peak)
RM with HID Proximity with LCD	235mA (avg); 350mA (peak)
RM with HID Proximity Mullion	135mA (avg); 250mA (peak)
Wiegand: RM1-W	80mA
ARM-1 Relay Module	17mA (relay active)
Wyreless PIM	300mA
Wyreless Reader Interface (WR1)	300mA
T.Rex Request to Exit Detector	50mA
<b>3<sup>rd</sup> Party Options</b>	
PCMCIA Modems	
Hayes Accure v.90/K56	220 mA
PCMCIA Ethernet	
Linksys PCM100	260 mA

\*These currents are estimates. Voltage tolerance on 12 VDC input is +/- 15%.

## Addendum x

### Cable Specifications

Detailed in the chart below are the recommended cables for use with C.CURE 800.

Signal	From	To	Belden Ref	AWG	# Pairs	Shielded	Max Length
RS-232 3 wire	Host	apC	9855	22	2	Yes	15m
RS-232 4 wire Dial-up	Host	apC	9855	22	2	Yes	15m
RS-232 5 wire	Host	apC	8303	22	3	Yes	15m
RS-485 4 wire	Host	apC	9842	24	2	Yes	1,200m
Reader bus	apC	RM/MRM input/output Modules	9841	24	1	No	1,200m
Reader bus Power	apC	RM/MRM input/output Modules	8442/8461	22/18	1	No	Distance subject to volt drop
Control	apC ARM	Door Strike	8461	18	1	No	Distance subject to volt drop
Supervised Input	Input Module	Contact switch	8442/8461	22/18	1	No	600m
REX	RM-4, 4E	Switch	8442/8461	22/18	1	No	600m
Door Contact	RM-4, 4E	Contact	8442/8461	22/18	1	No	600m
Relay	RM-4, 4E	ARM-1	9462	22	1	Yes	5m
Prox Reader (Wiegand)	RM-4, 4E	Wiegand Prox Reader	9536	22	3	Yes	50m (subject to CSA)
Proximity Reader	Wiegand Star Coupler	HID	9536/9537	24	3	Yes	50m (subject to CSA)*
Proximity Reader	Wiegand Star Coupler	Indala	9941	22	5 Wire	Yes	50m (subject to CSA)*
Proximity Reader	Wiegand Star Coupler	Sensor	8723	22	2	Yes	50m (subject to CSA)*
Magnetic Stripe Reader	RM-4, 4E	Mag Reader		22		No	3m

\* The distance that a Wiegand reader head can be from the star coupler, RM-4, or RM-4E is dependant upon the gauge of the wire.

AWG Wire Gauge	Maximum Distance
18	150m
20	100m
22/24	50m

## Sell Smart!



Illustration showing the antenna inside a smart card and that the card can be used for photo ID.

### Sell smart!

You should all know the benefits & uses to the end user of carrying a smart card rather than a standard proximity card. Not only does the card provide secure access control, allowing them access to their site and secure areas and provide visual identification by photo ID (from on-site software or card bureau service). Smart cards can store additional data to provide IT security (logical access), cashless vending, Time & Attendance and transport biometric data and much much more.

### The Smart Card Challenge

Often a customer is looking to future proof their company by wise investment. For many years customers have asked for smart cards, not needing the benefit at that time – but making sure the decisions they make at that time cannot be questioned at a later date when funds are requested to update an access control system. Now, there is no balance between spend and future requirements to be made. Smart card technology can now be provided at similar or even lower initial outlay. The customers ongoing costs are lower!

### How can I show the savings?

By offering a smart card alternative with every access control quotation – simply replace the requested reader with a Software House Multi-Tech or Multi-Format reader and upgrade. Upgrade the access cards to MIFARE. The more cards required on the system – the greater the saving. Now show the customer the ongoing cost for replacement cards – Some proximity card suppliers estimate up to 30% of system cards are replaced each year. The system 'running cost' is lower with smart card technology.

## AND YOU HAVEN'T SOLD THE BENEFITS OF SMART CARD TECHNOLOGY YET!

Now carry on selling! You have many existing and potential partners to provide the end user with a one stop shop for all the services that smart cards can offer. Make these local contacts now and gain a new lead generating service for each other!

### Smart Cards Presentations?

With the introduction of the Software House Multi-Technology & Multi-Format readers, your local EMEA ACVS contacts will be able to provide overviews and arrange training.

#### Key Decision Drivers:

**Ongoing Costs**  
With the cost of MIFARE cards being lower than standard 125KHz prox cards. A customers ongoing costs for new starters and replacement cards will be lower.

#### Usage

For the system users the card operates in the same way as any other prox card.

#### Benefits

Supplying the customer with a smart card opens up a wide range of additional service for the customer – at no additional outlay at the start

## Access control system format

The access control system format is the mathematical algorithm that specifies how data transmitted by the system is to be interpreted. The format specifies how many bits make up the data stream and which bits represent different types

of information. For example, the first few bits might transmit the facility code, the next few the unique ID number, the next few parity, and so on.

## Access Group

Permission programmed into the access control system to allow a cardholder to enter certain doors at specified times.

## ACM

Access Control Module Used in the iSTAR, each ACM supports up to 8 readers (up to 2 ACMs per iSTAR giving a maximum of 16 readers).

## Active Card

An access control proximity card, which is powered by a battery within the tag or keyfob. Be aware that batteries have a limited life span and in most cases cannot be replaced - hence the customer will need to budget for replacement within the life expectancy of the system.

## AES

Advanced Encryption Standard

## Anti-Passback (APB)

A facility where card readers are programmed as IN or OUT of a controlled area. Cardholders can enter and area BUT the card cannot be used at any other IN reader until the card is "seen" by the system to leave the area. This stops duplicate use of a card at controlled points

## apC

Advanced Processing Controller - Intelligent access control and alarm monitoring panel. Available in two or eight reader capacities.

## ARM-1

Auxiliary Relay Module for use with RM series readers and personality modules (other than the RM-4E)

## Asset Tagging

Usually managed by active tags and long range readers/door loops. Asset tagging provides tags, which are suitable for fixing to items such as laptops, projectors etc. Tags can be static (for fixed location items - works of art) or portable. Some have additional features such as tamper, so that the tag cannot be removed whilst within the secure area before the item is taken off site.

## Barcode

Low cost and low security means of providing access control. Commonly seen in libraries. Two methods of barcode are available - open (as seen in library books) which can be copied and reproduced giving no security at all and obscure, which has a panel over the barcode stopping copying.

## Barium ferrite

Contactless technology that uses barium ferrite in the composition of the credential to store data and make it available to the reading device.

## Biometric Reader

Uses a part of the human body to identify the user - fingerprint retina scanner etc. Most give a Wiegand output and can be integrated with our systems.

## Card Number

This is the internal encoded number - as read by the system

## Cashless Vending

A third party supplied system that allows the employee to use their access control card to purchase lunch, coffee etc. Smart cards are now being promoted for this purpose. Older systems use track 3 of the magstripe - only high output mag-stripe tape is accepted by some suppliers of cashless vending.

## CCTV

Closed Circuit Television

## Clock & Data

A card format usually associated with magstripe. This can

however be reproduced by proximity and other reader types.

## Cluster

In C•CURE terms this means a group of iSTAR controllers which communicate between each other. This allows data via the LAN/WAN to be sent via the master iSTAR reducing traffic. Once in a cluster, the Anti-Passback status of a card can be passed between the iSTARs in that cluster.

## Coercivity

This is the term for the resilience of a magstripe. Standard access control cards are Hi Co whilst Bankcards are usually Lo Co

## Contact smart card

A smart card that connects to the reading device through direct physical contact between the smart card chip and the smart card reader (see ISO/IEC 7816).

## Contactless smart card

A smart card whose chip communicates with the reader using RF and does not require physical contact with the card reader.

## Controller

The access control system component that connects to all door readers, door strikes and the host computer. The controller panel validates the reader and accepts data. Depending on the overall system design, the controller may next send the data to the host computer or may have enough local intelligence to determine the user's rights and makes the final access authorisation. The controller can also be called the control panel or panel.

## 3DES

Triple DES

## DES

Data Encryption Standard

## Door Forced

This is an alarm generated by the access system when the door is opened by unauthorised means break glass box, door override switch or forced entry. Door must be fitted with a monitor contact.

## Door Held Open

Alarm generated when an access controlled door is wedged in the open position after being opened by authorised means. Door must be fitted with a door contact. Some systems offer local alarm feature prior to a full alarm at a central location.

## Door Loop (reader)

This is a cable placed around the door frame, within the floor or ceiling to create a larger aerial for a proximity reader. Used for Hands free access and/or asset tagging.

## Door Loop (for lock)

Flexible conduit either surface or concealed at the doors hinged edge to transfer power and monitoring to a lock or electric release.

## Door Reader

The device on each door that communicates with a contactless card or credential and sends data from the card to the controller for decision on access rights.

## Door Strike

The electronic lock on each door that is connected to the controller.

## Duress Code/PIN

By changing the PIN code used by the authorised person to enter the site, an alarm may be generated at a central location identifying that the user has gained access whilst under duress. Access at the door is gained without any local alarm being generated.

## ECC

Elliptic Curve Cryptography

## EMV

Europay MasterCard Visa

## Ethernet

The most popular standard for networking information technology equipment. Devices are addressed using TCP/IP protocol.

## Excite field

The RF field or electromagnetic field constantly transmitted by the contactless door reader. When a contactless card is within range of the excite field, the internal antenna on the card converts the field energy into electricity that powers the chip. The chip then uses the antenna to transmit data to the reader.

## Fail-Safe

Term for a lock that requires power to lock - power fail releases the door. Not suitable for perimeter doors. Ideal for fire exit routes as a fire alarm input and breakglass box can release the door to meet fire officers requirements. All face to face mag locks are fail safe. Not suitable for very secure areas.

## Fail-Secure

Term for a lock that requires power to operate and allow the door to be opened. Motor locks and solenoid bolts are typical examples. Mechanical override is required for means of escape to meet the fire officer's requirements.

## FCC

Federal Communications Commission

## GCM

General Control Module Used in the iSTAR, this PCB is the main processor for the iSTAR and runs Windows CE.

## Global Anti-Pass back

Communication between controllers so that a cardholders Anti Pass Back status is available outside of the last used readers' controller. For C•CURE this is available via a cluster of iSTARs

## Graphics

Customers site drawing are either produced or taken from CAD file.

## GSA

General Services Administration

## Hall Effect

Monitoring built in to some magnetic locks to ensure that the holding force is up to the specified levels. Provides monitoring to overcome the typical methods of reducing holding force - grease, film etc - making forced entry much easier.

## Hands Free

The use of long range readers/door loops with active tags to monitor the movement of personnel and assets.

## Hi Co

Type of magnetic stripe tape - see Coercivity

## IEC

International Electrotechnical Commission

## ISO

International Organisation for Standardisation

## ISO Cards

A card, which meets the dimension requirements for credit cards. Used for Photo ID printing etc.

## iSTAR Pro

Ethernet ready controller available in eight or sixteen reader capacities

## Keyfob

Proximity tag supplied in a form that can be put on to a key ring (P40Key).

## LAN

Local Area Network. An IT data communications network for a local geographical area. This may be within one building or a cluster of buildings on a site/campus.

## Logical access

Access to online resources (e.g., networks, files, computers, databases).

## MIFARE

Smart card chip which can be used for access control. Each chip has a unique number, which can be read by an access control system - or a sector of memory within the chip can be programmed with an access control number for use by the system.

## Monitored

Access control door or similar that has a contact fitted to it to show its position/status. Contact can be either

magnetic or built in to the lock/release- separate magnetic contact is preferred.

## Magstripe

Contact form of access control - the magstripe is run past read heads within the reader. Low to medium security as the cards can be duplicated.

## MCU

See Microcontroller

## Microcontroller (MCU)

A highly integrated computer chip that contains all the components comprising a controller. Typically this includes a CPU, RAM, some form of ROM, I/O ports and timers. Unlike general purpose computer, a microcontroller is designed to operate in a restricted environment.

## Modem

A device used to convert data (usually RS232) into an analogue format for transmission over telephone lines - and then converts back again. One modem required at each end of line.

## Parallel port

Required for each printer to be connected to a PC.

## Passive Card

A proximity device, which is powered once the card/tag enters the proximity reader field. There is no on-board battery - therefore read ranges are reduced BUT there is no battery to replace.

## PC

Personal Computer

## Photo ID

Adding a photograph and printing other details onto an ISO card. This can include customer's company logo etc.

## Physical Access

Access to physical facilities (e.g. buildings, rooms, airports warehouses).

## PIN

Personal Identification Number. Used with keypads - should be considered for use in addition to any reader technology at the perimeter of a site to reduced the risk of lost cards being found and used by unauthorised person(s).

## PIR

Passive InfraRed. A technology which uses the body's, heat to detect presence and then generate a signal. Can be used for hands free egress control - T.REX. Note: any heat source can detected by a PIR.

## PKI

Public Key Infrastructure.

## Proximity

Card/reader technology which is contactless.

## Read Range

The distance between the contactless card reader and the contactless card or credential.

## RM Reader Module

Built into RM series readers or supplied as a PCB for non Software House supplied readers. The RM allows readers to be multi-dropped along a data line from an iSTAR or apC.

## RF

Radio Frequency

## RFID

Radio Frequency Identification

## RSA

Refers to public/private key encryption technology invented by RSA Security

### RTE

Request to Exit Push button or PIR device that releases the door.

### Shearlock

A magnetic lock that is fitted into the transom of the door enabling the door to swing through. Therefore door alignment on closing is critical. When locked the lock has shear pins, which fit into that armature to increase the holding force.

### Site Code

Part of the card number which can be specific to that site or customer.

### Smart Card

Card which contains a microprocessor and memory. Card can be used to store data for access control and third party applications - cashless vending etc.

### T&A

Time & Attendance. Record employees' on/off site time and can link to payroll systems. Should be kept separate from the access control system - card compatibility is the best solution.

### TCP/IP

Transmission Control Protocol/Internet Protocol. A layered set of protocols that allows sharing of applications among PC, workstations and network controllers.

### Tag

A proximity access control device - usually of the "clamshell" type - not a card or keyfob.

### Tailgating

Entering the secure area by following an authorised user through a door.

### Timezone

A period of time which can be given to a cardholder to grant access of assigned to other functions on the access control system.

### Track 2

Standard magstripe cards have three tracks - 1,2, & 3. Track 2 is the most commonly used for access control.

Stock Code No.	Page	Stock Code No.	Page	Stock Code No.	Page
06211.000	53	AS0100-008NPS	39	CC800-20S-EN	6
06213.000	53	AS0101-003	37	CC800-20S-FR	6
06223.000	53	AS0101-003MB	37	CC800-20S-GR	7
06225.000	53	CC800/CS	75	CC800-20S-NLD	7
130-915A	56	CC8000ESPLUS-RDS-CZK	19	CC800-20S-PL	7
131-912	56	CC8000ESPLUS-RDS-EN	17	CC800-20S-SP	6
132-183	56	CC8000ESPLUS-RDS-FR	17	CC800-30-40-SU	9
1326LGSMV-H10301	63	CC8000ESPLUS-RDS-GR	18	CC800-30RDS-CZK	19
1326LGSMV-S10701	63	CC8000ESPLUS-RDS-NLD	18	CC800-30RDS-EN	17
1326LMSMV-H10301	63	CC8000ESPLUS-RDS-PL	19	CC800-30RDS-FR	17
1326LMSMV-H10304	63	CC8000ESPLUS-RDS-SP	17	CC800-30RDS-GR	18
1326LMSMV-S10701	63	CC8000ESPLUS-S-CZK	8	CC800-30RDS-NLD	18
1326LSSMV-H10301	63	CC8000ESPLUS-S-EN	8	CC800-30RDS-PL	19
1326LSSMV-S10701	63	CC8000ESPLUS-S-FR	8	CC800-30RDS-SP	17
1336LGGMN-H10301	59	CC8000ESPLUS-S-GR	8	CC800-30S-CZK	7
1336LGGMN-H10304	59	CC8000ESPLUS-S-NLD	8	CC800-30S-EN	6
1336LGGMN-S10701	59	CC8000ESPLUS-S-PL	8	CC800-30S-FR	6
1336LGGMV-S10701	59	CC8000ESPLUS-S-SP	8	CC800-30S-GR	7
1346LSSM-H10301	60	CC8000ES-RDS-CZK	19	CC800-30S-NLD	7
1346LSSM-H10304	60	CC8000ES-RDS-EN	17	CC800-30S-PL	7
1346LSSM-S10701	60	CC8000ES-RDS-FR	17	CC800-30S-SP	6
1386LGGMN-H10301	58	CC8000ES-RDS-GR	18	CC800-40-8000SU	9
1386LGGMN-H10304	58	CC8000ES-RDS-NLD	18	CC800-40RDS-CZK	19
1386LGGMN-S10701	58	CC8000ES-RDS-PL	19	CC800-40RDS-EN	17
1386LGSMN-H10301	58	CC8000ES-RDS-SP	17	CC800-40RDS-FR	17
1391LKSMN-H10304	61	CC8000ES-S-CZK	8	CC800-40RDS-GR	18
1391LKSMN-S10701	61	CC8000ES-S-EN	8	CC800-40RDS-NLD	18
1431LGGMNN-H10301	62	CC8000ES-S-FR	8	CC800-40RDS-PL	19
1431LGGMNN-H10304	62	CC8000ES-S-GR	8	CC800-40RDS-SP	17
1431LGGMNN-S10701	62	CC8000ES-S-NLD	8	CC800-40S-CZK	7
391LKSMN-H10301	61	CC8000ES-S-PL	8	CC800-40S-EN	6
5355AGK00	65	CC8000ES-S-SP	8	CC800-40S-FR	6
5355AGN00	65	CC800-10-20-SU	9	CC800-40S-GR	7
5355AGS00	65	CC800-10-30-SU	9	CC800-40S-NLD	7
5365CGP00	64	CC800-10-40-SU	9	CC800-40S-PL	7
5365EGH00	64	CC800-10S-CZK	7	CC800-40S-SP	6
5365EGT00	64	CC800-10S-EN	6	CC800-5-10-SU	9
5375AGN00	68	CC800-10S-FR	6	CC800-5-20-SU	9
5395CG100	67	CC800-10S-GR	7	CC800-5-30-SU	9
6005BGB00	66	CC800-10S-NLD	7	CC800-5-40-SU	9
637.001.001	80	CC800-10S-PL	7	CC800-5S-CZK	7
637.001.002	80	CC800-10S-SP	6	CC800-5S-EN	6
637.001.006	80	CC800-1-10-SU	9	CC800-5S-FR	6
637.001.007	80	CC800-1-10-SUFV	9	CC800-5S-GR	7
637.001.008	80	CC800-1-10-SUNV	9	CC800-5S-NLD	7
637.008.401	83	CC800-1-5SU	9	CC800-5S-PL	7
637.008.402	83	CC800-1-5-SU-FV	9	CC800-5S-SP	6
637.008.403	83	CC800-1-5-SU-NV	9	CC800-901-DIGI	75
637.008.404	83	CC800-1ID-CZK	7	CC800-AAM	14, 15
637.008.405	84	CC800-1ID-EN	6	CC800-AAM-2	14, 15
637.008.406	84	CC800-1ID-FR	6	CC800-AMGR	30
637.008.407	84	CC800-1ID-GR	7	CC800-ARALK	28
637.008.451	84	CC800-1ID-NLD	7	CC800-CRPL	27
637.008.452	84	CC800-1ID-PL	7	CC800-ENHDOOR	26
637.008.453	84	CC800-1ID-SP	6	CC800-GPSERV	29
637.008.454	84	CC800-1S-NV-CZK	7	CC800-GT	27
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