

## iSTAR Pro Access Controller for up to 16 Readers

### Features That Make a Difference:

- Powerful 8 or 16 reader network-ready controller
- Expanded memory for up to 500,000 cardholders
- Global and local anti-passback with occupancy control
- Embedded intrusion zone functionality
- Retrofits possible with apC adapter plate
- Onboard battery backup and storage of configuration data using nonvolatile memory
- Supports both direct readers and RS-485 readers for greater coverage
- LCD provides important controller status and diagnostics information
- Supports multiple cards per cardholder and multiple formats for a highly secure, flexible solution
- Available in two rack-mount models for flexibility in mounting options
- Great solution for Universities, Healthcare, and Transportation applications
- Compatible with C•CURE 9000 and C•CURE 800/8000



iSTAR Pro is an intelligent, modular controller that offers a cost-effective access control solution for up to 16 doors. It features onboard Ethernet, embedded intrusion zone functionality, peer-to-peer communication, local/global anti-passback control, and up to 128 MB memory – enough to store over 500,000 cardholders.

### Supports up to 16 Readers

The iSTAR Pro 8 or 16 reader controller works with both C•CURE 800/8000 and C•CURE 9000. iSTAR Pro's strong feature set provides a solution to the most demanding access control applications. Its streamlined design features the latest technology and a minimum number of circuit boards to provide a highly dependable, cost-effective solution for enterprise-wide access control.

iSTAR Pro uses a General Controller Module (GCM) which includes standard 64 MB memory that can be increased to 128 MB. The GCM controls up to two Access Control Modules (ACMs), with each ACM supporting up to eight Wiegand or RM readers. The ACM includes 16 supervised inputs and eight output relays. iSTAR Pro also includes two PCMCIA slots, an alphanumeric LCD, and a rechargeable onboard battery backup.

### Seamless Migration from apC Controllers

Migrate easily from an apC/8X to an iSTAR Pro with an uncomplicated adapter plate – no need to replace the whole enclosure. apC/8X supports up to 8 readers while iSTAR Pro supports up to 16 readers. The adapter now includes standoffs for an iSTAR Pro GCM and two ACMs minimizing field labor costs while allowing for future expansion of your iSTAR Pro. In addition, you can easily flash new firmware directly from the host to all iSTAR controllers, ensuring that you always have the very latest technology.

### Network Ready

iSTAR Pro supports both static and dynamic IP addresses, using Dynamic Host Configuration Protocol (DHCP). Domain Name System (DNS) is also supported for host communications to simplify installation. In addition, the iSTAR Configuration Utility (ICU) reduces startup time by allowing you to view online controllers and change configuration parameters from a single interface.

# Features

## Ensure Reliable Communication with Clusters

iSTAR Pro controllers support Ethernet and RS-232 communication topologies and contain a PCMCIA slot for additional types of communications. Communication is peer-to-peer, meaning that the controllers communicate with one another without the need for host intervention. A single connection from the host supports multiple controllers through a TCP/IP subnet.

Clusters are user-defined groups of up to 16 controllers and can be created to enhance security by separating a widely dispersed facility into different controlled areas. A cluster is led by a master controller which manages the primary communication between the host computer and the rest of the controllers within the cluster. The master controller communicates all event and cardholder data between the cluster and the C•CURE host. The other controllers in the cluster or "members" communicate through the master to the other controllers in the cluster to link events and control anti-passback in the area secured by this cluster of controllers. To ensure constant security, clusters also feature a secondary communication path in the event the master controller loses communication with the network.

## Local and Global Anti-Passback Provides Effective Systemwide Security

Anti-passback prevents cardholders from passing their credentials back to others in order to gain access to secured areas. Global anti-passback is critical for ensuring uncompromised security on a large scale. Building upon cluster based anti-passback as described above, the controllers are able to send an anti-passback violation notice to the C•CURE server. Tailgating, or following another cardholder into a secured area without presenting a separate badge, can easily be flagged within the C•CURE monitoring station.

## Keypad Commands Provide the Ultimate in Control

iSTAR Pro supports custom keypad commands which provide a powerful way to easily activate events in C•CURE. These commands include anything from triggering a duress call and sounding an alarm, to locking and unlocking doors, directly from an RM reader keypad. Commands can be configured to require a card presentation and/or a card and PIN to validate the command.

## Extended Card Formats Enhance Security

iSTAR Pro supports extended card formats of up to 256 bits, providing the utmost in flexibility when configuring custom card formats. iSTAR Pro supports the full 200-bit FASC-N format for compliance with the US Government's FIPS 201 initiative, as well as the 128-bit GUID format for PIV-I credentials. These extended cardholder government formats are stored in the iSTAR locally allowing iSTAR to make the access decision even when the controller is offline from the host. Each format supports multiple data fields such as card number, site code, issue code, parity, agency code, system code, plus up to four custom card integer fields. Longer card numbers and formats offer greater protection against card duplication, and are especially valuable to customers who require card numbers that exceed 10 digits.

## Cardholder Flexibility

Used with C•CURE, iSTAR Pro allows administrators to assign up to five cards per cardholder record rather than having to create a separate record for each card. This simplifies the management and maintenance of personnel records. For additional flexibility, iSTAR Pro can support up to 128 card formats systemwide and ten card formats per reader. This expanded ability to use multiple card types (such as 26-bit, 37-bit, or Corporate 1000) at a single reader frees customers from having to consolidate or re-issue new cards.

# Features

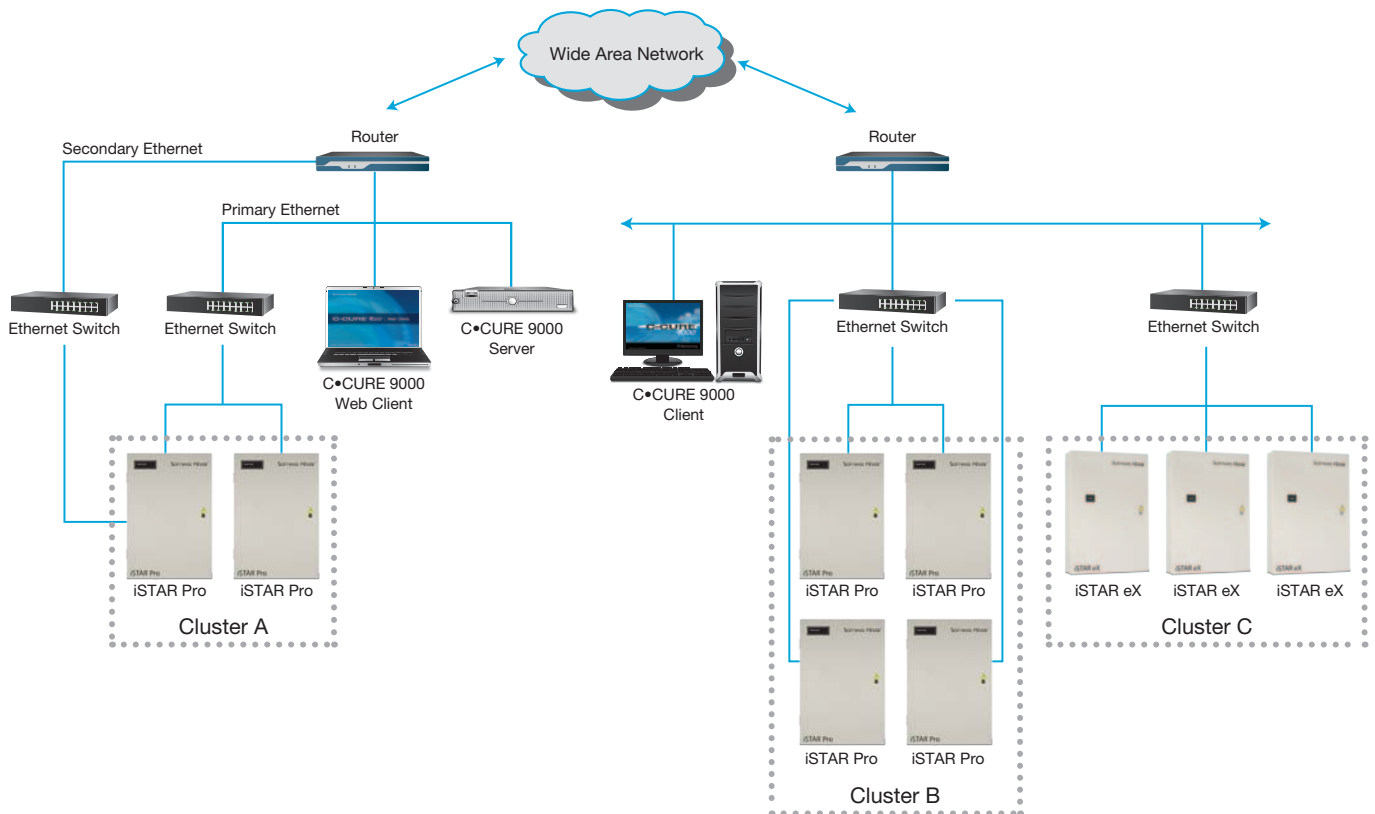
## Built-in Diagnostics to Easily Test and Troubleshoot

iSTAR Pro includes both built-in web diagnostics pages and a local LCD to test and troubleshoot hardware components such as inputs, outputs, reader ports, last card read, PCMCIA cards, and battery state. In addition, via the network, you can retrieve real-time status and diagnostics of:

- controller time/boot time
- total/available memory
- connection status
- firmware and OS versions
- hardware (MAC) and IP addresses
- downloaded clearances and cardholders

## Data Security is Critical

All diagnostic tools use password authentication to provide a barrier against intrusion. Additionally, all iSTAR controllers address the needs of businesses to protect critical security data. With instant database backup and restore capabilities, iSTAR controllers provide a highly reliable security solution and ensure that important data is protected, even during communications failure.



## Specifications

### Electrical

Power Input . . . . . 90 to 240 VAC, 47 to 63 Hz, 0.5 A  
 Power Output  
 (of power supply) . . . . . 12 VDC at 5.0 A maximum  
 Battery Backup . . . . . Rechargeable NiMH batteries provide backup of  
 memory and real-time clock for 24 hours, with a  
 24 hour recharge time  
 Network Port . . . . . 10Base-T Ethernet onboard  
 Second LAN Port . . . . . Using optional 10/100 PCMCIA network card

### 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 (23.3 lbs)  
 Construction . . . . . 16 AWG metal wall mounted locking cabinet with  
 tamper switch on door

**System Memory** . . . . . 64 MB RAM standard; expandable to 128 MB

### Inputs/Outputs

Encryption . . . . . RC4 128-bit  
 Modem Port . . . . . Through PCMCIA (Supported by  
 C•CURE 800/8000 only)  
 Supervised Inputs . . . . . 32  
 Input Expansion . . . . . Up to 128 additional, using I8 input  
 modules on RM bus  
 Outputs . . . . . 16 Form C relays, 30 VAC/DC, 2.5 A  
 Output Expansion . . . . . Up to 128 additional, using R8 output  
 modules on RM bus

Reader Inputs . . . . . 16 (Eight-reader model available)  
 Reader Support . . . . . RM readers/RM reader modules or  
 Wiegand output readers  
 Reader Technologies  
 Supported . . . . . Multi-Technology, Smart Card, Magnetic Stripe,  
 Proximity, and Wiegand  
 Maximum Distance to Door . . . . . RM: 1,219 m (4,000 ft) Wiegand: 150 m (500 ft)  
 Wiegand Reader Output  
 Voltage . . . . . 5 VDC or 12 VDC (jumper selectable)  
 Reader Current . . . . . 350 mA max per reader, not to exceed 2.5 A per  
 ACM for Wiegand and RM readers

**Regulatory** . . . . . UL294, UL1076, CE, FCC, RoHS

### Environmental

Operating Temperature . . . . . 0° to 50°C (32° to 122°F)  
 5 to 95% RH non-condensing  
 Storage Temperature . . . . . -20° to 70°C (-4° to 158°F)  
 Operating and Storage  
 with Battery . . . . . 0° to 50°C (32° to 122°F)

**Heat Dissipation** . . . . . 409 BTU/hr

Controller Capacity	iSTAR Pro 64 MB	iSTAR Pro 128 MB
Firmware Version	v4.0 or higher	v4.0 or higher
Number of personnel records with one clearance, one card/person, ten-digit cards	500,000	500,000
Number of personnel records with ten clearances, one card/person, ten-digit cards	295,000	500,000
Number of personnel records with one clearance, five cards/person, ten-digit cards	170,000	375,000
Number of personnel records with ten clearances, five cards/person, 40-digit cards	110,000	250,000

### Notes:

- (1) Memory allocation within iSTAR Pro is dynamic and shared between cardholders, event storage, and configuration information.
- (2) To estimate how much space is needed for the personnel database in iSTAR Pro v4.0 and higher for multiple cards and/or extended card capacity, refer to the iSTAR Storage Space Calculator located under the "Documents" tab on [www.swhouse.com](http://www.swhouse.com).
- (3) iSTAR Pro can support up to five cards for each cardholder record; each card is independent of each cardholder in the system.

## Related Products



iSTAR eX



iSTAR Edge



C•CURE 9000

## Approvals



[www.swhouse.com](http://www.swhouse.com)