iSTAR® controllers
Powerful, IP-enabled control panels for enterprise and government security

Features That Make a Difference:

- Suite of highly secure control panels to support enterprise applications – from four doors to thousands

- iSTAR eX controller features onboard FIPS 197-validated AES encryption, eliminating the need for external encryption boxes

- Supports redundant backup of configuration data

- Reliably backup your database to non-volatile flash memory

- LCD provides important controller status and diagnostics information

- Equipped with LEDs for each output, Ethernet and serial communication and onboard "heart-beat" monitor to ensure consistent operation

- DHCP support automatically assigns IP addresses for easy installation

- Supports multiple cards per cardholder and multiple formats for a highly secure, flexible solution

- Fully compatible with C•CURE® 800/8000 with full support of features such as government threat levels and event clearance filters

- Embedded Windows® CE operating system

iSTAR Pro – supports up to 16 readers

iSTAR Pro is an intelligent, modular controller designed to integrate various event management applications on one controller, providing ease of installation and interoperability among vital applications.

iSTAR Pro has a streamlined design that features the latest technology and a minimum of circuit boards to provide a highly dependable, cost-effective solution for enterprise-wide access control.

iSTAR Pro utilizes a General Controller Module (GCM) which includes standard 64 MB memory that can be increased to 128 MB using a field-installable, industry-standard 64 MB SDRAM module. iSTAR Pro also includes two PCMCIA slots, alphanumeric LCD and DIP switches for configuration and diagnostics, as well as various network and serial communication ports. The GCM controls up to two Access Control Modules (ACM) with each supporting up to 8 Wiegand or RM readers. The ACM also includes 16 supervised inputs and 8 output relays for door control.

iSTAR eX – supports up to 4 readers

iSTAR eX is a four door Ethernet-ready controller that provides a FIPS 197-validated 256-bit encryption algorithm. This is ideal for government applications or for any enterprise looking for the highest security available in the industry today.

For large corporations with smaller facilities around the globe, iSTAR eX works with the scalable C•CURE 800/8000 system and other Software House controllers to provide the most demanding customers with a solution they can use across their entire corporation. Whether installed at the corporate headquarters with hundreds of employees, or at the regional sales branches with only a few employees, iSTAR eX ensures that the same security policies and procedures are implemented across the entire corporation.

In the same vein, the iSTAR eX provides government facilities with a highly secure option for protecting their Sensitive Compartmented Information Facilities (SCIFs) which can be small, classified areas with a limited number of doors. iSTAR eX provides the security necessary to protect these facilities without the overhead of an 8 or 16 door controller. At the same time, the modular design of iSTAR eX sets it up perfectly for expansion by supporting future door control modules.

features

Easy to setup with DHCP/DNS/WINS support

iSTAR® controllers support Dynamic Host Configuration Protocol (DHCP) to simplify installation. DHCP is a communications protocol that lets network administrators centrally manage and assign Internet Protocol (IP) addresses from a central point and automatically send a new IP address when a device is plugged into a different place on the network. For easy setup, iSTAR controllers also support Domain Name System (DNS), which translates domain names into IP addresses, and Windows Internet Naming Service (WINS), a system that determines the IP address associated with a particular network computer.

Ensure Effective Communication with Clusters

iSTAR Pro controllers support Ethernet and RS-232 communication topologies and contain a PC card; iSTAR eX contains a PC Card Type II (PCMCIA) slot for additional types of communications. The iSTAR eX contains two onboard Ethernet ports for communications. iSTAR communication is peer-to-peer[1], meaning that the controllers communicate with one another without the need for host intervention and 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® 800/8000 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 fails or loses communication with the network.

Control Security Better with Global Anti-Passback

Global anti-passback is critical for ensuring uncompromised security. Using a cluster configuration as described above, the iSTAR controllers can easily share cardholder status and location allowing them to send an anti-passback violation notice to C•CURE 800/8000 should a cardholder pass back a card to another person to use or if that same cardholder tries to access the same area more than once during a specified period. Similarly tailgating, or following another cardholder into a secured area without presenting a separate badge, can easily be flagged.

(1) Daisy-chaining is not supported.

Keypad Commands Provide the Ultimate in Flexibility

Keypad commands provide a powerful way to activate events - anything from triggering a duress call to 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 PIN to validate the command.

Extended Card Numbers Enhance Security

iSTAR controllers support extended card numbers allowing you to comply with certain federal guidelines (such as FIPS 201) that require a Cardholder Unique Identifier (CHUID), which is comprised of multiple field lengths. In addition, iSTAR controllers support card numbers of up to 256 bits, eliminating the need for multiple facility codes, site codes or offset in order to avoid card duplication. Longer card numbers offer greater protection against card duplication and are especially valuable to customers who require card numbers that exceed 10 digits.

How Many Cards? What Kind of Cards? You Decide

Used with C•CURE 800/8000, iSTAR controllers allow administrators to assign up to 5 cards per cardholder record rather than having to create a separate record for each card. Using this powerful feature, users can assign a PIN as one of the cards providing a flexible and secure solution and greatly simplifying the management and maintenance of personnel records.

For additional flexibility, iSTAR controllers can support up to 128 card formats system-wide and 10 card formats per reader including smart cards. 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.

Easily Test and Troubleshoot with Configuration Diagnostics

iSTAR controllers include a built-in suite of diagnostics to test and troubleshoot hardware components such as inputs, outputs, reader ports, last card read, PCMCIA cards and battery charge state. In addition, via the Internet, 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

Plus, for easy installation and quick troubleshooting, iSTAR controllers include an LCD.

Data Security is Critical

iSTAR® eX combines AES (Advanced Encryption Standard) encryption with the strict guidelines set forth by government regulations to provide a highly secure solution. AES specifies a FIPS-approved cryptographic algorithm that can be used to protect electronic data. The AES algorithm converts data to an unintelligible form called ciphertext (encryption); then converts the data back into its original form, called plaintext (decryption). iSTAR eX and C•CURE® 800/8000 communicate using 256-bit FIPS-validated AES encryption making it the first security system in the industry to satisfy this rigorous requirement from the federal government.

Secure communication is provided with iSTAR Pro controllers through RSA Data Security's RC4 technology implemented using Microsoft CryptoAPI. Multi-key authentication for real-time communication and password authentication for use with the local diagnostic configuration utility provides a barrier against intrusion into iSTAR Pro controllers.

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.

Easily Upgradeable

All iSTAR controllers feature the ability to flash new functionality directly from the host, ensuring that you have the very latest technology.

Choose an iSTAR architecture that makes sense for your application

Providing a security solution that is unsurpassed in the industry for its versatility and security, iSTAR Pro and iSTAR eX controllers can be used together in the same system. This provides an enterprise solution that recognizes that even the largest corporations have smaller branches and facilities that may need to use the same security standards without enormous overhead.

iSTAR controllers and apC controllers can operate together with a C•CURE 800/8000 host although they do not communicate directly. However, event linking can easily be configured through the host. Even though these devices cannot be connected together, they can both exist on the same network.
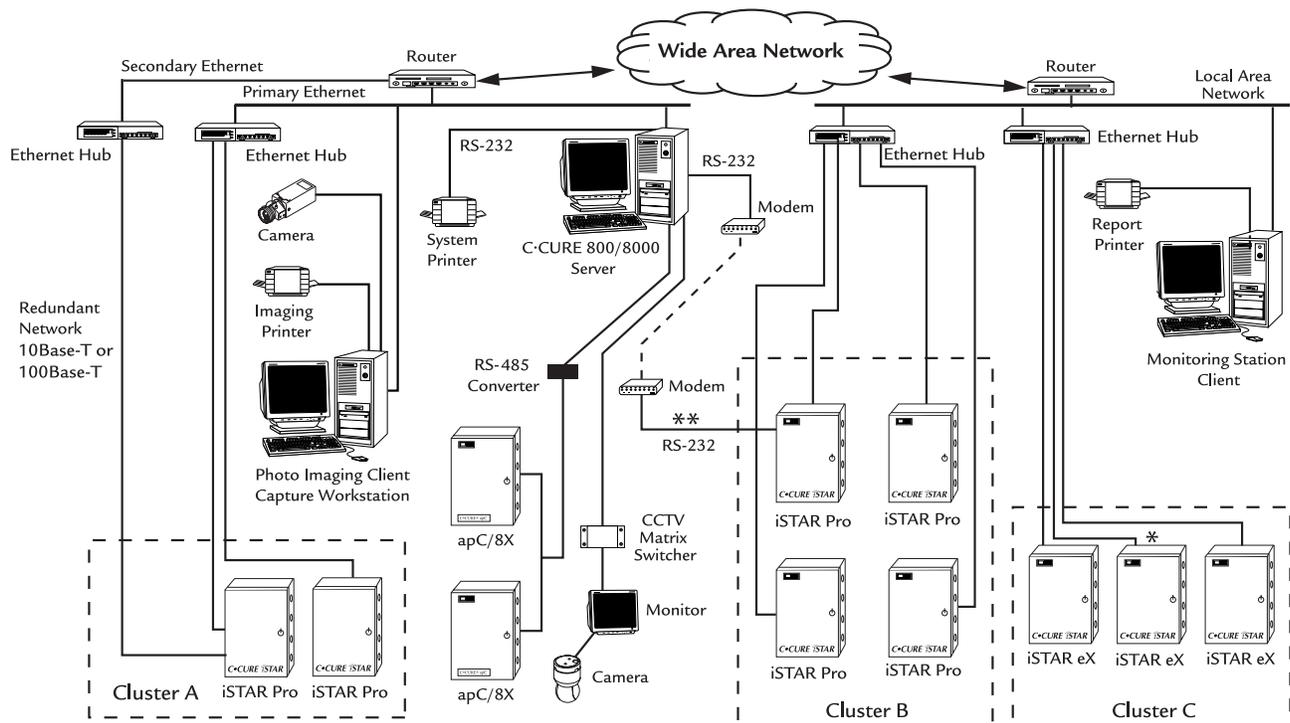
*Alternate Master takes over when Master panel fails

**Alternate communication path takes over when primary communication path fails

***iSTAR Pro and iSTAR eX controllers cannot exist together in the same cluster. Also, the iSTAR eX does not support a dial-up modem currently as a primary or alternate communication path.

	iSTAR® Pro	iSTAR eX
Electrical		
Power Input	90 to 240 VAC, 47 to 440 Hz, 0.5 A	90 to 260 VAC, 47 to 440 Hz, 0.5 A
Power Output (of power supply)	12 VDC at 3.3 A maximum	12 VDC at 6.5 A maximum; internal UPS provides up to 4 hours backup time
Auxiliary Hardware	Relay contacts rated at 30 V AC/DC 2.5 A inductive, 5.0 A non-inductive	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)	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)	16.8 kg (37 lbs) with battery
Construction	16 AWG metal wall mounted locking cabinet with tamper switches on door and rear	16 AWG metal wall mounted locking cabinet with tamper switches on door and rear
Regulatory	UL294, UL1076, CE, FCC, RoHS	UL294, UL1076, CE, FCC, RoHS
Environmental		
Operating Temperature	0° to 50°c (32° to 122°F) 5 to 95% RH, noncondensing	0° to 50°C (32° to 122°F) 5 to 95% RH, noncondensing
Storage Temperature	-20° to 70°C (-4° to 158°F)	-20° to 70°C (-4° to 158°F)
Operating and Storage with Battery	0° to 50°C (32° to 122°F)	-20° to 40°C (-4° to 104°F)

Controller Capacity	iSTAR Pro 64 MB	iSTAR Pro 64 MB	iSTAR Pro 128 MB	iSTAR Pro 128 MB	iSTAR eX 64 MB
Firmware version	up to v3.3	v4 or higher	up to v3.3	v4 or higher	v4.1 or higher
Number of personnel records with 1 clearance, 1 card/person, 10-digit cards	500,000	525,000	1,000,000	1,200,000	410,782
Number of personnel records with 10 clearances, 1 card/person, 10-digit cards	295.000	295.000	640,000	680,000	235,774
Number of personnel records with 1 clearance, 5 cards/person, 10-digit cards	NA	170,000	NA	375,000	132,820
Number of personnel records with 10 clearances, 5 cards/person, 40-digit cards	NA	110,000	NA	250,000	88,546

Note:

(a) Memory allocation within iSTAR Pro and iSTAR eX is dynamic and shared between cardholders, event storage, and configuration information.

(b) To estimate how much space is needed for the personnel database in iSTAR Pro v4.0 and higher and iSTAR eX for multiple cards and/or extended card capacity, please refer to the C•CURE 800 v9.1 README file located in the Member Center of www.swhouse.com.

(c) iSTAR can support up to 5 cards for each cardholder record; each card is independent of each cardholder in the system.

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