

## iSTAR Ultra LT

Modular Access Controller for  
up to 16 Readers



### Features That Make a Difference:

- Powerful IP-ready door controller for up to 16 readers
- Hardened Linux embedded OS for improved security and scalability
- Onboard 256-bit AES network encryption
- Enables wireless locks to communicate with C•CURE 9000 providing a fully integrated and managed lock solution
- Native intrusion zone functionality
- Includes global anti-passback and advanced peer-to-peer clustering
- Manages up to 500,000 cardholders in local memory

iSTAR Ultra LT is a powerful, network-ready door controller that supports up to 16 readers, using IP-ACM Ethernet Door Modules. Its strong feature set answers the most demanding access control requirements of enterprise applications.

### Power and Flexibility

iSTAR Ultra LT features a fast dual-core processor that manages 2GB of RAM and 16GB of storage, allowing for tremendous expansion for future applications. It has an onboard gigabit LAN network port, and an onboard Wi-Fi antenna that can be used for either the primary communications path back to the server, or it can be configured for a reliable backup path.

Database backups and all buffered transactions are stored on non-volatile SD card memory, and a real-time rechargeable clock battery keeps the clock powered during a power failure.

### Expansion and Servicing

iSTAR Ultra LT is easily scaled up to 16 readers through the use of low-cost, two-reader Ethernet door modules (IP-ACMs), providing extreme flexibility in designing your system architecture.

iSTAR Ultra LT also supports wireless locksets, becoming essentially an eight-reader wireless lock access point. iSTAR Ultra LT can control up to eight readers total, through any combination of IP-ACM readers and wireless lockset readers.

### Network Ready

iSTAR Ultra LT includes an onboard gigabit network port and onboard Wi-Fi for primary and secondary communications to the server. The panel includes 256-bit FIPS 197 network encryption, with custom key management, and 802.1X port authentication protocol support which secures the controller from potential network threats. iSTAR Ultra LT supports both static and dynamic IP addresses, using DHCP and DNS to simplify network installation.

### Fully Integrated and Managed Lock Solution

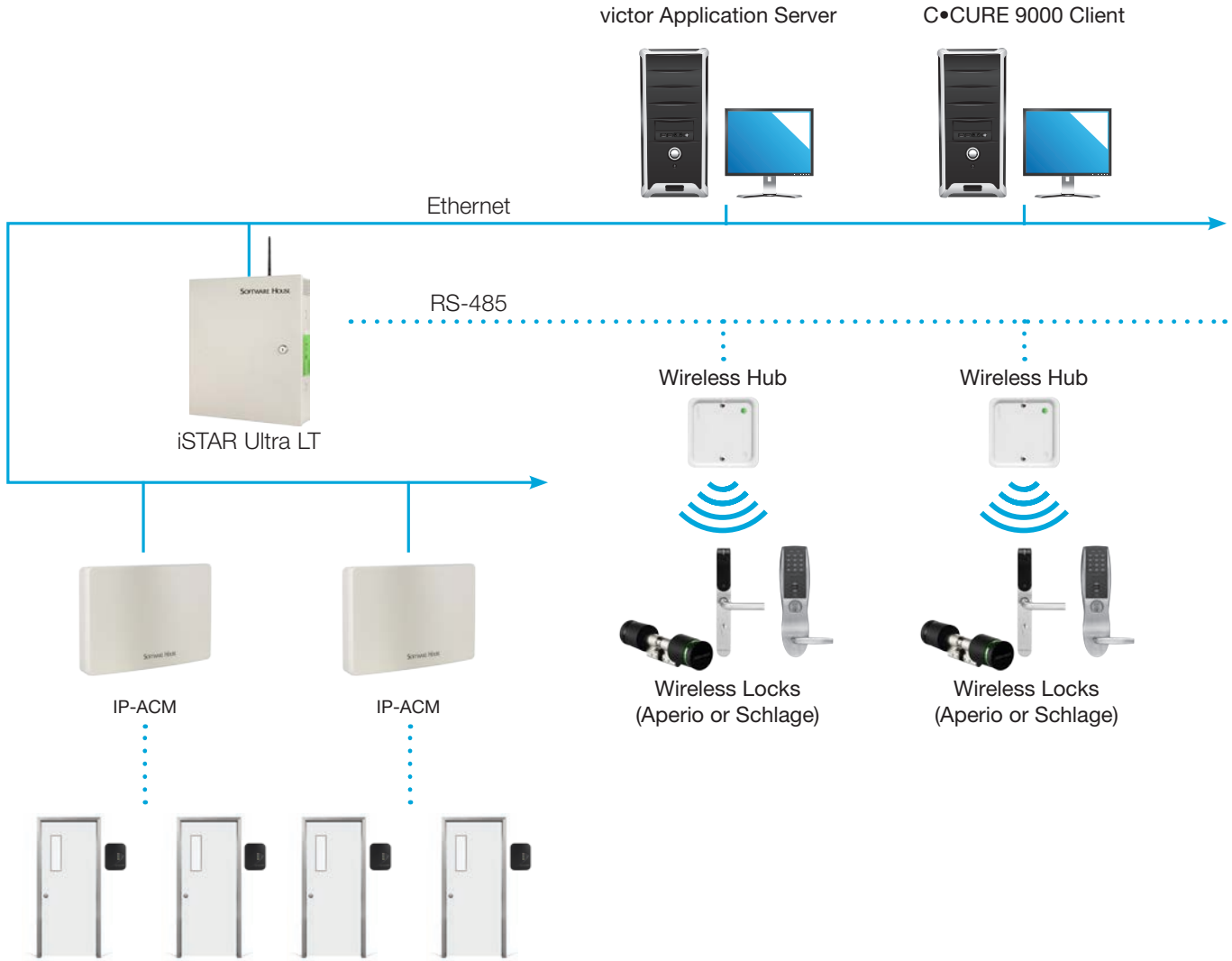
Utilizing iSTAR Ultra LT, wireless locks from ASSA ABLOY and Schlage<sup>1</sup> communicate with C•CURE 9000 providing a fully integrated and managed lock solution. Up to eight ASSA ABLOY Aperio wireless locks or Schlage AD300/AD400/NDE/LE locksets<sup>2</sup> can be managed by a single iSTAR Ultra LT. In addition to traditional locksets, the Aperio line also includes cabinet and data center locks, allowing you to extend the breadth of your access control system to non-traditional openings. Each lockset communicates using AES 128-bit encrypted wireless technology to a wireless hub, which is then connected to the iSTAR Ultra LT with a simple RS-485 communications bus.

All activity and alarms from each wireless device are sent to iSTAR Ultra LT and then up to the C•CURE 9000 in real time, guaranteeing a high level of control and visibility of door actions. Besides standard card access transactions, each device also communicates low battery, tamper, and communications status to the system.

<sup>1</sup> Wi-Fi functionality not supported until future release of C•CURE 9000

<sup>2</sup> Not available in the EMEA region

# iSTAR Ultra LT and Wireless Lock System Layout



## Specifications

### Physical

Dimensions (H x W x D)	
Plastic	183 x 307 x 62 mm (7.20 x 12.09 x 2.44 in)
Metal	391.65 x 311.15 x 83.77 mm (14.25 x 12.25 x 3.30 in)
Board Only	148 x 112 x 18 mm (5.83 x 4.41 x 0.71 in)
Weight	
Plastic	1.0 kg (2.2 lbs)
Metal	1.52 kg (3.35 lbs)
Enclosure Material	ABS plastic, with front and rear tamper; 18 gage SGCC metal, front tamper
Operating Temperature	0-50°C (32-122°F)
Operating Relative Humidity	5-95% RH non-condensing
Storage Temperature	-20 - 60°C (-4 - 140°F)

### Electrical

Power Requirements	Local power: 12V DC (-15/+20%); Board only: 700 mA@12V DC; Max. of 1.60 A@12V DC for board plus all attached devices
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PoE Standards	PoE (802.3af), 12.95W min; PoE Plus 802.3 at, 25.5W min (power negotiation uses two-state physical discovery or LLDP-MED protocol)
Power Available for Attached Devices	PoE: 315 mA@ 12V; PoE Plus or local power: 750 mA@12V
Heat Dissipation	150 BTU/Hr typical
Memory and RTC Backup	Rechargeable lithium battery provides RTC backup; database and buffered transactions stored in non-volatile memory

### System and Network

CPU	Freescale i.MX6 1 GHz dual core Cortex-A9
System Memory	2 GB RAM
SD Storage	16 GB SD card
Primary Network Port	10/100/1000 Mbps, full duplex, auto-negotiate
Network Encryption	AES 256-bit, with custom key management
Indicators and Switches	LEDs for power, LAN activity, serial port activity

## Memory Capacity

Ten Clearances,  
Five Cards/Person,  
40 Digit Card. . . . . 500,000 cardholders  
Transaction Buffer Size . . . . . 10,000 minimum, 500,000 maximum  
Dedicated Inputs . . . . . Cabinet tamper, AC fail, low battery

## Inputs/Outputs Using IP-ACM

Number of Readers Supported . . . 2  
Types of Readers Supported . . . . Wiegand, RS-485 (RM and OSDP Secure Channel), and Smart Protocol (TST-100 Touchscreen Terminal)  
Maximum Distance to Door . . . . . RS-485: 1,219 m (4,000 ft);  
Wiegand: 150 m (500 ft)  
Reader Power Available  
(dependent on power supply) . . . 12V DC, 0.75A max per reader  
RM Bus Communications . . . . . Two ports, RS-485 half duplex, two wire, plus optional two wires for device power  
Number of Supervised Inputs . . . . 4, configurable supervision per input  
Input Expansion . . . . . Up to 16 additional inputs using I8 modules on RM bus  
Number of Relay Outputs . . . . . 2  
Output Power Selection . . . . . Individually configurable via jumper as power sourcing or dry contact relay  
Output Power (Wet) . . . . . Up to 0.75 A per lock, selectable 12/24V  
Output Rating, Dry Contact . . . . . 0 to 30V AC/DC, 3 A max  
Output Protection . . . . . Individual resettable current switch, snubber, transzorb, reverse polarity protection  
Output Expansion . . . . . Up to 16 additional relay outputs using R8 modules on RM bus

## Specifications for Wireless Lockset Support

Wireless Lockset  
Technologies Support . . . . . ASSA ABLOY Aperio;  
Schlage AD300/AD400/NDE/LE<sup>2</sup>

GCM RS485 Ports to  
Connect Wireless Hubs . . . . . 1  
Max # of Locksets per  
RS485 Port . . . . . 8 or 16  
Max # of Wireless  
Hubs/PIMs per RS485 Port . . . . . 8 (Aperio); 8 (Schlage)  
Max # of Locksets per  
Wireless Hub . . . . . 8-16 Aperio or 8-16 Schlage

## Regulatory

Access Control . . . . . UL 294, CSA C22.2 No. 205 (Canada)  
Burglar Alarm . . . . . UL 1076, ULc 1076 (Canada)  
CE . . . . . EN 55022 (EMI), EN 55024 (EMC),  
EN 60950-1 (safety)  
Safety . . . . . IEC 60950-1  
EMI . . . . . FCC Part 15 Class A, EN 55022,  
ICES-003 (Canada), VCCI Class A ITE (Japan),  
C-Tick (AS/NZS CISPR 22 - Australia/NZ)  
EMC . . . . . EN 55024, EN 50130-4, IEC 62599-2,  
EN 61000-6-1  
Network Encryption . . . . . FIPS 197

## Ordering Information

Model Numbers	Description
USTAR-LT08-EM	iSTAR Ultra LT, supports 8 readers, in metal enclosure
USTAR-LT08-EP	iSTAR Ultra LT, supports 8 readers, in plastic enclosure
USTAR-LT08-MB	iSTAR Ultra LT, supports 8 readers, board only
USTAR-LT16-EM	iSTAR Ultra LT, supports 16 readers, in metal enclosure
USTAR-LT16-EP	iSTAR Ultra LT, supports 16 readers, in plastic enclosure
USTAR-LT16-MB	iSTAR Ultra LT, supports 16 readers, board only

<sup>3</sup>Not available in the EMEA region

## Related Products



C•CURE 9000



C•CURE 9000  
SiteServer



iSTAR Ultra

## Approvals



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