

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

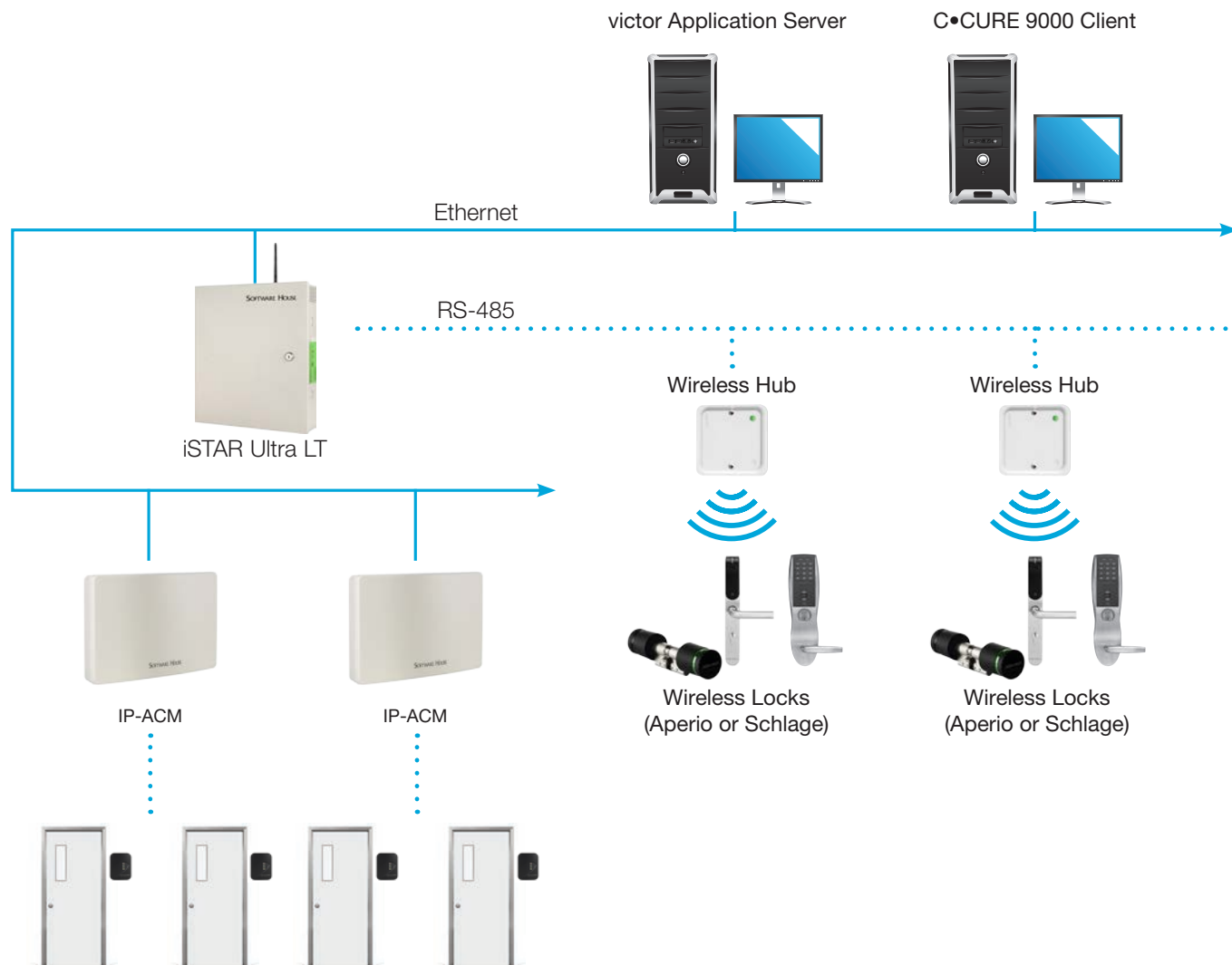
Utilizing iSTAR Ultra LT, wireless locks from ASSA ABLOY and Schlage¹ communicate with C•CURE 9000 providing a fully integrated and managed lock solution. Up to eight ASSA ABLOY Aperio wireless locks or Schlage AD300/AD400/NDE/LE locksets² can be managed by a single iSTAR Ultra LT. In addition to traditional 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.

¹ Wi-Fi functionality not supported until future release of C•CURE 9000

² 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 |
|--------------------|---|

| | |
|---|---|
| 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 | Freemove 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/LE²

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 |

³Not available in the EMEA region

Related Products



C•CURE 9000



C•CURE 9000
SiteServer



iSTAR Ultra

Approvals

