ALLEGION

((·)) ENGAGE™
TECHNOLOGY

GWE Gateway

ENGAGE™ Gateway with IP (PoE) and RS-485 communication

Overview

The ENGAGE™ Gateway is designed to be used with devices that feature ENGAGE™ technology, including Schlage® Control™, LE, NDE, CTE as well as Von Duprin® Remote Undogging (RU) and Remote Monitoring (RM). The ENGAGE Gateway enables these devices to be connected in real-time with Physical Access Control Software (PACS) providers. Each ENGAGE Gateway can support up to 10 wireless devices for a wide range of applications, including resident units, office and suite entries, conference rooms, sensitive storage areas and perimeter entries.

Security
ENGAGE technology was designed from the ground up with security in mind. ENGAGE technology leverages industry-leading security practices, including AES 256 bit and TLS encryption to provide customers with a secure, dependable experience.

Reliability
Regular, frequent communication between the Gateway and linked ENGAGE™ enabled devices allows the Gateway to send commands such as lock, unlock and lock down from an ACP or IP host in real-time (commands are executed in < 5 seconds). All while enabling up to a 2-year battery life in linked wireless devices.

Efficiency
The ENGAGE Gateway provides the ability to leverage existing IP based or RS-485 infrastructure for maximum efficiency. Ethernet connectivity provides ability to connect to the network for real-time access control directly from an in- or out-of-network host; to further simplify installation the Gateway can be powered over ethernet (PoE). Additionally, the ENGAGE Gateway is designed to work seamlessly in an existing RS-485 environment to extend access control to more doors. It can be powered from the access control panel (ACP) or from the 12VDC supply (included).

Features and benefits

- Small form factor, versatile design fits almost anywhere

- Plug and play connectivity without opening or drilling into the housing. External recessed power, antenna, RS-485 and Ethernet (PoE) ports for easy set-up

- Designed to work seamlessly in an existing RS-485 environment

- Designed with PoE built in to leverage a building's existing network infrastructure for communication and power

- Easily and securely commissions in seconds with the ENGAGE™ mobile app—no proprietary handheld device required

- Secure AES-256 bit encrypted 2.4 GHz Bluetooth 4.0 communication between Gateway and ENGAGE™ enabled devices does not interfere with Wi-Fi networks

- Capable of managing up to 10 ENGAGE enabled devices

- Optional 12 VDC external power supply included to achieve UL294 Listing

CYBERSECURITY
Learn about Allegion's commitment

Gateway specifications

Communication protocol (Gateway to Lock)	2.4 GHz Bluetooth version 4.0 (spread spectrum, dynamic channel switching, 40 channels)
Transmission/encryption (Gateway to Lock)	AES-256 bit key
Credential verification time	< 1 second[1]
BLE communication range	A detailed site survey is recommended to determine range in each unique environment. Up to 30' can be achieved in typical building environments. Under ideal conditions, up to 50' line of sight may be possible. A detailed site survey is recommended to determine if the extended range can be achieved. Performance is dependent on local physical (geometry, construction materials, and furnishings) and RF environment. For planning purposes users should consider estimating at least 10% contingency for Gateway quantity. The TKE ENGAGE Test Kit is now available for site surveys. Reference the ENGAGE Gateway Placement Guide for details.
Visual communications	LED status indicators
System interface	Ethernet to IP host[2] RS-485 to ACP[3]
Transmission/encryption (Gateway to ACP or IP host)	TLS version 1.2 or greater (to IP host) Optional AES-128 bit key (to ACP)
Gateway Discovery Methods (by partner IP host)	Zero-configuration (zeroconf), Static IP, or DHCP with hostname option
Power supply	PoE (12.95W compliant to IEEE 802.3af/at) 12 VDC or 24 VDC (terminals)
Operating current	PoE: 60 mA 12 VDC: 330 mA, 24 VDC: 100 mA
Operating temperature	32º to 120ºF (0º to 49ºC)
Operating humidity	0% to 100% non-condensing
Dimensions (H x W x D)	5.1" x 6.0" x 1.2" (13.0 cm x 15.3 cm x 3.04 cm)
Weight	8.6 oz (.24 kg)
Cable specifications	DC terminal input: 18AWG, 2 conductor (Belden 8760 or equivalent) up to 1000 ft (305 m) Gateway to ACP: 24AWG, 2 or 4 conductor shielded (Belden 9842, 9841 or equivalent) up to 4000 ft (1219 m) Gateway to router: CAT3, CAT5/5E or CAT6 up to 328 ft (100 m)
Data rate	Gateway to Lock: up to 1 Mbps (Bluetooth) Gateway to ACP: 9.6 kbps (RS-485) Gateway to IP Host: up to 100 Mbps (Ethernet)
Certifications	UL294, FCC Part 15, Industry Canada(IC), RoHS

1 Dependant on latency time of access control system
2 Supports NDE, LE, CTE,Schlage Control Smart locks and Von Duprin RU and RM
3 Supports NDE, LE and Von Duprin RU and RM

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Additional features

Real-time communication
Regular, frequent communication between the Gateway and linked ENGAGE enabled devices allows the Gateway to send commands such as lock, unlock and lock down from an ACP or IP host in real-time (commands are executed in < 5 seconds). All while enabling up to a 2-year battery life in linked wireless devices.

Secure encrypted transmissions
All communications between the Gateway, the ENGAGE mobile app and ENGAGE enabled devices are encrypted with an AES-256 bit key to provide virtually uncompromisable security. Additionally, all communications between the Gateway and an IP host over an existing network are secured with TLS 1.2 (or newer) encryption.

Visual indications
- Power up
- Factory default state
- Connected to mobile device
- Normal operation
- Linking status
- Diagnostics

Edge device status* (available through host connection)
- Card data
- Door position
- Loss of communication
- Request-to-exit
- Low battery
- Interior cover tamper guard
- Lock/unlock status
- Request-to-enter
- Deadbolt position
- Interior push button

Configurable items from Gateway*
- Relock parameters
- Card data format conversion
- Extended unlock
- Fail safe/fail secure/fail as-is
- Door held pre-alarm
- Cache memory parameters
- Reader configuration
- Keypad configuration
- Inside pushbutton configuration
- User interface configuration

*Capability varies by edge device. Refer to device solution sheet.

Ordering information

- GWE – ENGAGE™ Gateway with RS-485 and IP (PoE) connectivity. Supports up to 10 ENGAGE™ enabled devices with select brands of access control panels.