GWE2 Gateway

ENGAGE™ Gateway with IP (PoE) & RS-485 Communication



Overview

The ENGAGE™ Gateway is designed to be used with devices that are on the ENGAGE™ Platform, 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 5 wireless devices for a wide range of applications, including resident units, office and suite entries, conference rooms, sensitive storage areas and perimeter entries.

Security

The ENGAGE Platform was designed from the ground up with security in mind. It 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™ Platform 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, it 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).

Features & 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 5.1 communication between Gateway and ENGAGE™ Platform devices does not interfere with Wi-Fi networks
- Capable of managing up to 5 ENGAGE Platform devices
- Superior Security: Meets Modern cyber-security standards

CYBERSECURITY
Learn about Allegion's commitment

Gateway Specifications	
Communication protocol (Gateway to Lock)	2.4 GHz Bluetooth version 5.1 (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 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)	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	32° to 120°F (0° to 49°C)
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	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, ULC 60839, 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.

Ordering Information

GWE2 – ENGAGE Gateway with RS-485 and IP (PoE) connectivity. Supports up to 5 ENGAGE™ Platform devices with select brands of access control panels.

NOTE: Please consult with your PACS provide to verify support of GWE2 model.

Additional Features

Real-Time Communications

Regular, frequent communication between the Gateway and linked ENGAGE Platform 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 Platform 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
- Request-to-enter
- Low battery
- Interior cover tamper guard
- Lock/unlock status
- 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
- Inside pushbutton configuration
- User interface configuration

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

Allegion, the Allegion logo, Schlage, the Schlage logo, and Von Duprin are trademarks of Allegion plc, its subsidiaries and/or affiliates in the United States and other countries. All other trademarks are the property of their respective owners.

© 2026 Allegion plc

010842, Rev. 03/26