

infiNET EX® Wireless Gateway

- > infiNET EX® wireless gateway
- > Ultra dependable mesh network technology
- > Dynamic discovery for fast, easy setup
- > “Wi-Fi® friendly” channel selection for trouble-free operation
- > Dynamic Frequency Allocation prevents RF interference
- > Built-in RF network diagnostics
- > Up to 150 feet (46 m) range indoors, 250 feet (76 m) outdoors^[1]
- > Supports up to 100 infiNET EX devices and 5 expanders^[2]
- > Supports up to six MLX-3 and MTX-3 handheld remotes^[2]
- > High-speed Ethernet control system interface
- > PoE network powered
- > EMerge Alliance® compatible

The CEN-RFGW-EX is a 2-way RF gateway/transceiver designed to enable communications and management for a complete infiNET EX® wireless network of dimmers, keypads, remotes, shades, thermostats, door locks, and other devices. The CEN-RFGW-EX links the infiNET EX network to a Crestron® control system via high-speed Ethernet. “Wi-Fi® friendly” RF technology permits selection from 16 ISM channels within the 2.4 GHz spectrum to minimize the possibility of interference with other RF equipment including 802.11 devices. Built-in Dynamic Frequency Allocation continuously monitors RF conditions, automatically selecting the clearest channel to prevent interference from neighboring networks, cordless phones, and microwaves.

infiNET EX®

Ultra-reliable infiNET EX wireless technology provides steadfast 2-way RF communications throughout a residential or commercial structure without the need for physical control wiring. Employing a 2.4 GHz mesh network topology, nearly every infiNET EX device on the network functions as an expander, passing command signals through to every other device within range (approximately 150 feet or 46 meters indoors), ensuring that every command reaches its intended destination without disruption. Each infiNET EX device that is added to the network effectively increases the range and stability of the entire network by providing multiple redundant signal paths.^[1]

Easy Setup

Setting up a complete infiNET EX network is simple, utilizing dynamic discovery to locate and acquire each RF device automatically. At all times, the CEN-RFGW-EX monitors each device on the network, ignoring any other 2.4 GHz signals, and reconfiguring the entire network automatically in response to new sources of interference and other changes in RF conditions.

Up to 100 infiNET EX devices can be linked to a control system via a single CEN-RFGW-EX gateway.^[2] Additional gateways may be installed to support more devices, with up to 16 gateways possible in a complete system (RF conditions allowing). Wireless expanders (model [CLW-EXPEX](#) or [GLA-EXPEX](#)^[3]) may be added wherever needed to extend the network by filling in gaps between devices.^[4]



Handheld Remote Gateway

The CEN-RFGW-EX also provides a wireless gateway for Crestron [MLX-3](#) and [MTX-3](#) Handheld Remotes^[3]. Up to 6 remotes can be associated with a single gateway.^[2] Each wireless connection is monitored continuously, diligently keeping track when any remote goes to sleep or wanders out of range, restoring communications seamlessly when it reappears on the network.

Single-Wire Hookup

The CEN-RFGW-EX gateway communicates with a control system over Ethernet and gets its operating power over the same Ethernet connection using PoE technology. PoE (Power over Ethernet) simply requires the presence of an 802.3af or 802.3at PoE power source. Crestron offers the [PWE-4803RU](#) PoE Injector, which connects inline with the Ethernet cable, allowing for installation at any convenient location between the gateway and the network switch. The PWE-4803RU is capable of powering a single gateway, and is available separately or packaged with the gateway as model CEN-RFGW-EX-PWE.

Crestron also offers Ethernet switches with built-in PoE (models [CEN-SW-POE-5](#), [CEN-SWPOE-16](#), and [CEN-SWPOE-24](#)^[3]), affording a complete high-performance networking solution capable of providing PoE for multiple gateways and other PoE devices. Using an Ethernet switch with built-in PoE eliminates the need for individual PoE injectors.

EMerge Alliance® Registered

This device is EMerge Alliance registered and designed to work within a 24VDC room-level power distribution system. The EMerge Alliance is a not-for-profit open industry association leading the rapid adoption of safe DC power distribution in commercial buildings through the development of EMerge Alliance standards^[5]. Crestron is a proud member and supporter of the Alliance. For more information about Crestron Solutions for EMerge Alliance Applications visit: www.crestron.com/emerge.

CEN-RFGW-EX infiNET EX® Wireless Gateway

SPECIFICATIONS

Wireless

RF Transceiver: infiNET EX® 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), default channel 15; IEEE 802.15.4 compliant
Range (typical): 150 ft (46 m) indoor, 250 ft (76 m) outdoor to nearest mesh network device(s); subject to site-specific conditions and individual device capabilities^[1]
Maximum 100 devices and 5 expanders per gateway^[2,4]

Ethernet

10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, IEEE 802.3af and 802.3at Type 1 compliant

Controls & Indicators

PWR: (1) Green LED, indicates operating power supplied via PoE
ACTIVITY: (1) Red LED, indicates wireless communications
ACQUIRE: (1) Recessed pushbutton with red LED, used to set up connections with wireless devices
SETUP: (1) Recessed pushbutton with red LED, used to set up connection with the control system via Ethernet
LAN PoE: (1) Green and (1) Amber LEDs, green indicates link status, amber indicates Ethernet activity

Connectors

Antenna: (1) Connection for supplied antenna

LAN PoE: (1) 8-wire RJ45, female;
10Base-T/100Base-TX Ethernet port;
Power over Ethernet compliant

Power Requirements

Power over Ethernet: IEEE 802.3af (802.3at Type 1) Class 1 PoE Powered Device (3.84W)

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 7 BTU/Hr

Enclosure

Construction: Aluminum w/polycarbonate label overlay and (4) integral mounting flanges
Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

(Without antenna)

Height: 6.41 in (163 mm)
Width: 3.91 in (100 mm)
Depth: 1.43 in (37 mm)

Weight

13.1 oz (373 g)

MODELS & ACCESSORIES

Available Models

CEN-RFGW-EX: infiNET EX® Wireless Gateway
CEN-RFGW-EX-PWE: infiNET EX® Wireless Gateway w/PoE Injector

Included Accessories

PWE-4803RU: PoE Injector (Qty. 1 included with CEN-RFGW-EX-PWE)

Available Accessories

ANT-EXT: Antenna Extender
CLW-EXPEX: infiNET EX® Wireless Expander
GLA-EXPEX: Crestron Green Light® Wireless Expander for infiNET EX® Networks
PWE-4803RU: PoE Injector
CEN-SW-POE-5: 5-Port PoE Switch
CEN-SWPOE-16: 16-Port Managed PoE Switch
CEN-SWPOE-24: 24-Port Managed PoE Switch

Notes:

1. Battery-powered infiNET EX devices do not provide expander functionality, and may have reduced RF range capabilities. Consult the specifications for each network device to confirm its actual wireless capabilities.
2. A single infiNET EX gateway supports up to 100 wireless network devices inclusive of up to 6 **MLX-3** and/or **MTX-3** remotes.
3. Item(s) sold separately.
4. Up to 5 **CLW-EXPEX** or **GLA-EXPEX** infiNET EX Expanders may be added to the network for extended range.
5. Information regarding the EMerge Alliance can be found at www.emergealliance.org

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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