

CEN-GW1

Universal Wireless Gateway - ER, SG, and infiNET EX® Wireless Networks



- *Universal wireless gateway adds the SG (Sub GHz) wireless network to the proven performance of the infiNET EX mesh network and Extended Range ER wireless network*
- *Supports Crestron battery-powered shades*
- *Dynamic discovery for fast, easy setup*
- *Wi-Fi® friendly channel selection for trouble-free operation*
- *Built-in energy scan tool to help select wireless channel*
- *Extend infiNET EX wireless coverage with infiNET EX expanders²*
- *Extend ER wireless coverage with the built-in ER device roaming capabilities*
- *Mount the antennas remotely using the ANT-EXT-10 (one required for each antenna, sold separately)*
- *Power using PoE or 24VDC power pack*
- *Integrator Friendly Enclosure (IFE) can be mounted to a flat surface, a DIN rail, or stacked on other IFE compliant devices; rack and pole mount options are also available (sold separately)*

The CEN-GW1 is a universal wireless gateway that communicates with Crestron® SG (Sub GHz), ER (Extended Range), and infiNET EX® wireless devices. A single CEN-GW1 creates SG, ER, and infiNET EX® wireless networks to facilitate 2-way communication between a Crestron® control system and a network of Crestron wireless remotes, keypads, lighting dimmers, motorized shades, thermostats, door locks, and other wireless devices.

Universal Wireless Gateway

The universal wireless gateway features 2-way wireless communication between the gateway and wireless devices. The CEN-GW1 can manage SG wireless, infiNET EX® wireless, and ER (Extended Range RF) devices simultaneously, eliminating the need for separate gateways.¹

Easy Setup

The CEN-GW1 makes it easy to set up a network of wireless devices by eliminating the need for separate gateways, antennas, and LAN connections. Additionally, Crestron wireless devices are discovered and acquired in one simple step.

Power over Ethernet for Simple Installation

Using PoE technology, a single cable run is used for both power and data for the CEN-GW1.

Power an entire network of Crestron PoE devices using a Crestron PoE switch ([CEN-SW-POE-5](#) or [CEN-SWPOE-16](#)) or a single device using a PoE Injector ([PWE-4803RU](#)). All PoE injectors and switches are sold separately.

As an alternative to PoE, use a 24VDC power pack ([PW-2407WU](#), sold separately) to power the CEN-GW1.

Integrator Friendly Enclosure

Mount the CEN-GW1 almost anywhere using the Integrator Friendly Enclosure (IFE). The IFE can be mounted to any flat surface, snapped onto a standard DIN rail, or stacked on other IFE compliant devices. Rack mount and pole mount kits are also available.

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Specifications

Wireless Communications

Transceiver **infiNET EX Transceiver:**
2-way RF, 2.4 GHz ISM;
Channels 11-26 (2400 to 2483.5 MHz), default
channel 15;
IEEE 802.15.4 compliant;
Mesh network topology;
infiNET EX devices act as expanders²;
Dedicated infiNET EX expanders are also
available ([CLW-EXPEX](#), sold separately)

ER Transceiver:
2-way RF, 2.4 GHz ISM;
Channels 11-26 (2400 to 2483.5 MHz), default
channel 15;
IEEE 802.15.4 compliant;
Star network topology;
ER devices can roam between up to eight
gateways;
Additional gateways act as range extenders
(sold separately)

SG Transceiver:
2-way RF;
Channels 0-29 (903 to 926.2 Mhz);
SG channels are scanned after a factory
restore, the best channel is selected;
Star network topology

**Transmit
Power** **infiNET EX and ER:**
+19 dBm

SG:
+27 dBm

Range **infiNET EX:**
150 ft (46 m) indoor (250 ft (76 m) outdoor)
to nearest mesh network device(s)

ER:
100 to 200 ft (31 to 61 m) maximum indoor
(1,000 ft (305 m) outdoor) to ER wireless
device

SG:
230 ft (70 m) indoor (656 ft (200 m)
outdoor) to SG wireless device

Range is subject to site-specific conditions and individual
device capabilities

Supported Devices

Supports Crestron and third-party infiNET EX devices,
Crestron ER wireless devices, Crestron SG devices, and
Crestron infiNET EX expanders^{1,2}

Maximum Devices Allowed³

infiNET EX Devices	infiNET EX Expanders	ER Devices	SG Devices
100	5	0	50
90	5	1	50
80	5	2	50
70	5	3	50
60	5	4	50
50	5	5	50
40	5	6	50
30	5	7	50
20	5	8	50
10	5	9	50
0	5	10	50

NOTE: To maintain optimal performance, use no more than
50% of the maximum devices allowed per gateway. Use
additional gateways to support more devices. Up to 16
gateways can be used in a system (RF conditions allowing).

Wired Communications

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

Controls and Indicators

PWR (1) Bi-color green/amber LED;
Green indicates operating power is being
supplied via PoE or 24VDC;
Amber indicates that the device is booting

ACT EX/ER (1) Green LED;
Indicates infiNET EX and ER wireless RX
and TX data activity

ACT SG (1) Green LED;
Indicates SG wireless RX and TX data
activity

CEN-GW1

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ACQUIRE	(1) Recessed pushbutton with red LED: Used to enter Acquire mode to pair wireless devices; Press to enter and exit Acquire mode
SETUP	(1) Recessed pushbutton with red LED Used to set up connection with the control system via Ethernet; To factory reset the gateway, press and hold SETUP until the SETUP LED flashes 6 times.
RESET	(1) Recessed pushbutton; To reboot the gateway, press and hold RESET for 8 seconds.
LAN PoE	(1) Green and (1) Amber LED; Green indicates Ethernet link status; Amber indicates Ethernet activity

Connectors

ANTENNA EX/ER	(1) Connection for supplied EX/ER antenna or antenna extender
ANTENNA SG	(1) Connection for supplied SG antenna or antenna extender; Yellow bands around the top
COMPUTER	(1) Micro-B USB female; Computer console port, installer use only; For setup and firmware upgrades
G	(1) 4-40 screw, chassis ground lug
24VDC 0.75A	(1) 2.1 x 5.5 mm DC power connector; 24VDC power input; PW-2407WU power pack sold separately
LAN PoE	(1) 8-pin RJ-45, female; 10BASE-T/100BASE-TX Ethernet port; Power over Ethernet compliant

Power

Power over Ethernet	IEEE 802.3at Type 1 (802.3af compatible) Class 3 (5.3 W) PoE Powered Device
Power Pack	0.75A (minimum) @ 24VDC (PW-2407WU sold separately)
Power Consumption	5.3 W typical

Environmental

Temperature	41° to 104 °F (5° to 40 °C)
Humidity	10% to 90% RH (noncondensing)

Heat Dissipation	18.1 BTU/hr
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Construction

Enclosure	IFE small form factor, black and blue plastic with die-cast zinc top cover
Mounting	Freestanding, stackable, surface mount, or 35 mm DIN EN 60715 rail mount; Occupies 8 DIN module spaces (144 mm); Surface/DIN rail mounting bracket included; Rack mount and pole mount kits sold separately

Dimensions

(Without antenna)

Height	1.35 in. (35 mm); 1.77 in. (45 mm) with bracket
Width	5.04 in. (128 mm); 5.36 in. (137 mm) with bracket
Depth	5.17 in. (131 mm)

Weight

Gateway	13.1 oz (372 g) with antennas
Bracket	1.5 oz (42 g)

Compliance

Regulatory Model: M201913001
UL, CE, RCM, FCC, IC, WEEE

Models

CEN-GW1

Universal Wireless Gateway, ER Wireless, SG Wireless, and infiNET EX® Wireless Gateway

CENI-GW1

Universal Wireless Gateway, ER Wireless, SG Wireless, and infiNET EX® Wireless Gateway, International Version

Available Accessories

For a list of available accessories, visit the [CEN-GW1](#) product page.

CEN-GW1

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Notes:

1. The CEN-GW1 is not compatible with [MTX-3](#), [TPS-6X](#), or [UFO-WPR-3ER](#) model remotes.
2. 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. Use infiNET EX expanders ([CLW-EXPEX](#), sold separately) to fill gaps in coverage and extend the wireless range of the infiNET EX network. infiNET EX expanders are only for infiNET EX networks and offer no benefit to the performance of ER and SG devices. A maximum of five infiNET EX expanders may be deployed on an infiNET EX network.
3. Up to six MLX-3 remotes can be used.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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