

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

The CEN-GW1 and CENI-GW1 are universal wireless gateways designed for use with Crestron® Sub Ghz (SG) wireless, infiNET EX® wireless, and "ER" (Extended Range RF) wireless devices.

NOTE: The CEN-GW1 and CENI-GW1 are functionally similar. For simplicity within this guide, the term "CEN-GW1" is used except where noted.

The CEN-GW1 is powered via PoE (Power over Ethernet) or with an optional power pack.



In the Box

- 1 CEN-GW1 or CENI-GW1, Universal Wireless Gateway
- Additional Items**
- 1 Bracket, Mounting, Integrated DIN Rail Clip (4519035)
- 1 Antenna, EX/ER, 2.4 GHz, 1/4 Wave, Reverse Polarity, Female (2001016)
- 1 Cable, Ethernet, CAT5e, 5 ft (1.52 m) (2022311)
- 2 Screw, 6-32 x 3/8 in., Pan Head, Phillips (2007225)

- CEN-GW1 Only**
- 1 Antenna, SG, 916 MHz, 1/2 wave, Reverse Polarity, Female (2055721)

- CENI-GW1 Only**
- 1 Antenna, SG, 868 MHz, 1/2 wave, Reverse Polarity, Female (2055720)



Determine the Installation Location

Install the CEN-GW1 in a location that will provide optimum performance. Consider the following when determining the installation location:

NOTE: For additional information, refer to the Best Practices for Installation and Setup of Crestron RF Products Reference Guide (Doc. 6689) at www.crestron.com/manuals.

- Place the gateway at least 15 ft (4.6 m) from other Sub Ghz (SG), infiNET EX gateways, Crestron ER gateways, or Wi-Fi® access points.
- Place multiple gateways on different RF channels.
- Place the gateway at least 6 ft (1.8 m) from the nearest Bluetooth® device.

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



Installation

Mount the CEN-GW1 to a DIN rail or a wall. The CEN-GW1 can also be rack mounted. Refer to the RMK-IFE-1U Installation Guide (Doc. 7627) at www.crestron.com/manuals for details. It can also be placed on any flat, level surface.

NOTES:

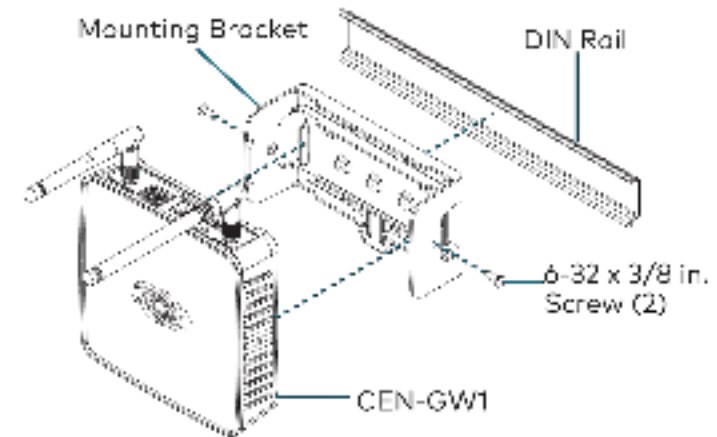
- This product must be installed and used in accordance with appropriate electrical codes and regulations.
- This product must be installed by a qualified electrician.

DIN Rail Mount

To mount the CEN-GW1 to a DIN rail, perform these steps:

1. Hang the mounting bracket on the top of the DIN rail and press the bottom toward the DIN rail until it snaps into place.
2. Insert the CEN-GW1 into the mounting bracket until it snaps into place.
3. Secure the CEN-GW1 to the mounting bracket. Insert a 6-32 x 3/8 in. screw into each side of the mounting bracket and tighten using a Phillips screwdriver.

NOTE: Do not use the included screws to mount the bracket to the bottom of the CEN-GW1, as it will then not be possible to remove the device from the DIN rail.

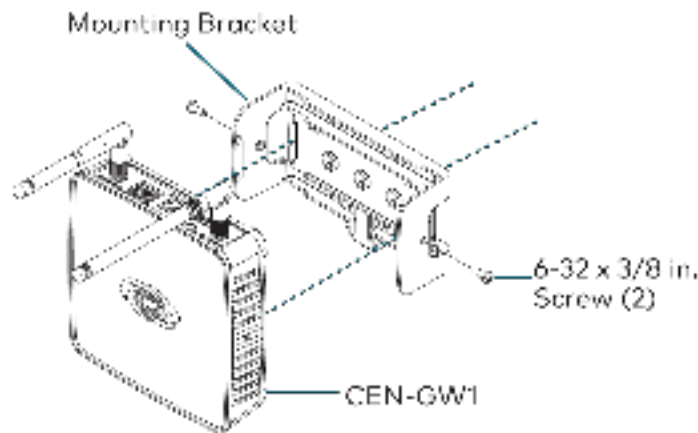


Universal Wireless Gateway, ER Wireless, SG Wireless, and infiNET EX® Wireless Gateway

Wall Mount

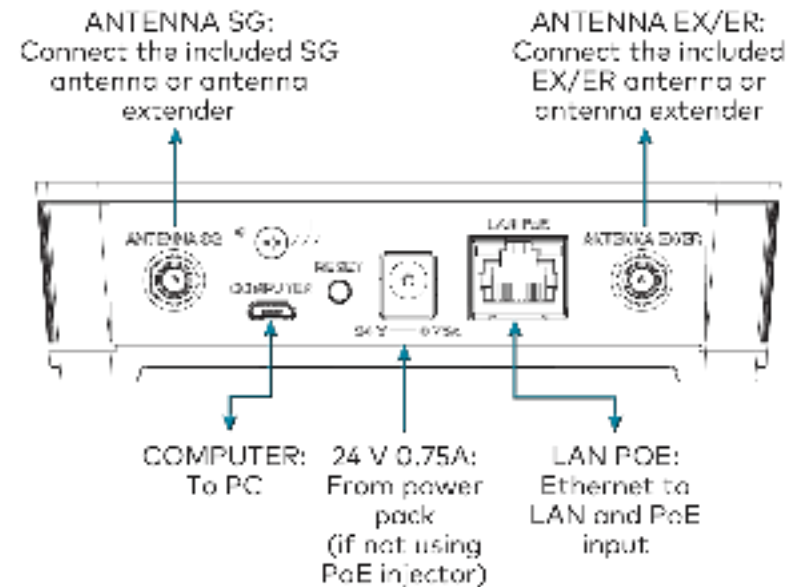
To mount the CEN-GW1 to a wall, perform these steps:

1. Secure the mounting bracket to a vertical, flat surface using screws that are appropriate for the mounting surface (not included).
2. Insert the CEN-GW1 into the mounting bracket until it snaps into place.
3. Secure the CEN-GW1 to the mounting bracket. Insert a 6-32 x 3/8 in. screw into each side of the mounting bracket and tighten using a Phillips screwdriver.



Make Connections

Make the necessary connections for your application. Turn on power to the CEN-GW1 after all connections have been made. Use Crestron power supplies for Crestron equipment.



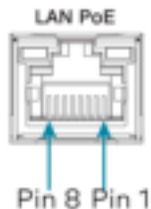
- When PoE is not available, supply power using a Crestron power supply such as a PW-2407WU (not included).
- When a Crestron PoE switch is available, connect the Ethernet cable directly to the PoE switch.

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

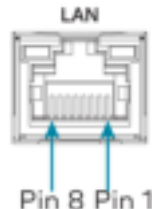
- When using a Crestron PoE injector:
 - Connect the CEN-GW1 to the PoE injector:
 - Connect the CAT5e cable (supplied) to the LAN PoE port on the CEN-GW1.
 - Connect the other end of the CAT5e cable to the LAN PoE port on the PoE injector.
 - Connect the PoE injector to the LAN.
 - Connect a CAT5e cable (not included) to the LAN port on the PoE injector.
 - Connect the other end of the CAT5e cable to the LAN.
 - Attach the AC power cord to the IEC 320 connector on the PoE injector and the other end into an active AC outlet.

NOTE: Arrows denote internal pin assignments of the LAN PoE and LAN ports.

LAN PoE Pin Assignment



LAN Pin Assignment



Pin	Signal	Pin	Signal
1	Data Pair 1	1	Data Pair 1
2	Data Pair 1	2	Data Pair 1
3	Data Pair 2	3	Data Pair 2
4	+ VDC	4	No Connection
5	+ VDC	5	No Connection
6	Data Pair 2	6	Data Pair 2
7	- VDC	7	No Connection
8	- VDC	8	No Connection

Connect the Antenna

Attach the EX/ER antenna to the ANTENNA EX/ER connector and the SG antenna to the ANTENNA SG connector.

If necessary, extend the antenna using an ANT-EXT-10 Antenna Extender (sold separately).

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



Assign the RF Channel

Before use, assign an RF channel to the CEN-GW1. The CEN-GW1 uses RF channels 11 through 26. Crestron recommends using RF channel 15 (default) or 20.

For optimum performance in a Wi-Fi environment, do not set the RF channel within a Wi-Fi channel band. Refer to the information below when choosing the RF channel in a Wi-Fi environment.

RF Channel(s)	Within Wi-Fi Channel	Adjacent to Wi-Fi Channel
11 - 14	1	-
15 (Default)	-	1, 6
16 - 19	6	-
20	-	6, 11
21 - 24	11	-
25	-	11
26	-	-

NOTE: Remember the following when pairing infiNET EX and ER devices:

- Sub Ghz (SG) and infiNET EX devices automatically set their RF channel assignment to match the channel assigned to the gateway.
- ER devices must have their RF channel manually assigned to match the channel of the gateway.

Use the EasyConfig tool in Crestron Toolbox™ software to assign the RF channel. In the "EasyConfig" window for the wireless gateway, select **Functions** and then **infiNET EX Gateway**. Refer to the Crestron Toolbox software Help file for details.



Acquire Devices to the Gateway

Crestron Sub Ghz (SG), infiNET EX, or ER devices can communicate with a CEN-GW1 after they have been acquired. A device can be acquired to only one gateway.

NOTES:

- Use Crestron Toolbox software to set the RF channel before starting the acquire process. The default RF channel is 15.
- Before adding ER devices, set the RF channel to match the channel assigned to the gateway.
- After turning on the CEN-GW1, wait 15 seconds before entering **Acquire** mode.
- In an environment with multiple gateways, only one gateway should be in **Acquire** mode at a time.
- Enter **Acquire** mode on the gateway before entering **Acquire** mode on the device.

To acquire a Sub Ghz (SG), infiNET EX, or ER device, perform the following steps:

1. To enter **Acquire** mode, press **ACQUIRE** on the CEN-GW1. The **ACQUIRE** LED turns on to indicate that the gateway is in **Acquire** mode and that it is ready to acquire devices.

NOTES:

- You can use Crestron Toolbox software to enter and exit **Acquire** mode.
- The gateway exits **Acquire** mode after one hour. Use Crestron Toolbox software to change the timeout period.

2. To acquire a Sub Ghz (SG), infiNET EX, or ER device, enter **Acquire** mode on the device. Refer to the it's manual for details.

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

3. To exit **Acquire** mode, press **ACQUIRE** on the CEN-GW1. The **ACQUIRE** LED turns off.



Visit the Product Page

Scan the QR code to visit the product page.

CEN-GW1



www.crestron.com/model/6511027

CENI-GW1



www.crestron.com/model/6511029

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

Additional Information

Original Instructions

The U.S. English version of this document is the original instructions.
All other languages are a translation of the original instructions.

Regulatory Model: M201913001

Crestron product development software is licensed to Crestron dealers and Crestron Service Providers (CSPs) under a limited nonexclusive, nontransferable Software Development Tools License Agreement. Crestron product operating system software is licensed to Crestron dealers, CSPs, and end-users under a separate End-User License Agreement. Both of these Agreements can be found on the Crestron website at www.crestron.com/legal/software_license_agreement.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

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

Crestron, the Crestron logo, Crestron Toolbox, infiNET EX and the infiNET EX logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Bluetooth is either a trademark or registered trademark of Bluetooth SIG, Inc. in the United States and/or other countries. Wi-Fi is either a trademark or registered trademark of Wi-Fi Alliance in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

©2021 Crestron Electronics, Inc.

Doc. 8860A

05/21/21

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

Getting Started

Scan the QR code to view the Quick Start Guide.



www.crestron.com/docs/8860

For additional information on the Crestron® CEN-GW1, visit www.crestron.com/model/6511027.

For additional information on the Crestron® CENI-GW1, visit www.crestron.com/model/6511029.

RF Gateway Important Notice

Do not install this Crestron® gateway within 15 feet (4.6 meters) of other SG (Sub GHz) gateways, infiNET EX® gateways, Crestron ER gateways, or Wi-Fi® access points.

Certification and Compliance

Regulatory Model: M201913001

IMPORTANT NOTE: To comply with ISED CANADA and FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

REMARQUE IMPORTANTE: Pour être conforme aux exigences de conformité d'ISED CANADA et de la FCC en matière d'exposition aux radiofréquences, l'antenne utilisée pour cet émetteur doit être installée de manière à assurer une distance de séparation d'au moins 20 cm de toutes les personnes toute autre antenne ou émetteur.

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:
(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Please note that any modifications to the device software or configuration, including but not limited to the init file(s), can cause device performance to vary beyond the scope of the currently referenced FCC authorization. Accordingly, if any user modifications are sought to be made to the device software or configuration, the user may be required to independently seek fresh FCC and other regulatory authorizations as relevant prior to distributing or marketing the devices or products incorporating the same.

Industry Canada (IC) Compliance Statement

CAN ICES-3 (B)/NMB-3(B)

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.



The Waste Electrical & Electronic Equipment (WEEE) directive marking on a product indicates that it should not be disposed of with general waste. Instead, you are encouraged to reuse or recycle the product in accordance with Directive 2012/19/EU of the European Union. Proper disposal of this product will help prevent potential negative effects on the environment and human health, which could otherwise be caused by inappropriate waste handling. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation. For information about recycling this product, please contact your household waste disposal service, your original distributor, or Crestron.



This product is listed to applicable UL® Standards and requirements tested by Intertek® services.

Ce produit est homologué selon les normes et les exigences UL applicables par Intertek Prestations de service.



Legal

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

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

Crestron, the Crestron logo, and infiNET EX are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. UL is either a trademark or registered trademark of Underwriters Laboratories, Inc. in the United States and/or other countries. Intertek and the Intertek logo are either trademarks or registered trademarks of Intertek Group in the United States and/or other countries. Wi-Fi is either a trademark or registered trademark of Wi-Fi Alliance in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

©2021 Crestron Electronics, Inc.