

CEN-HPRFGW

Extended Range RF Wireless Gateway

- > 2-way "Extended Range" RF wireless transceiver/gateway
- > Supports up to 16 touch screens and remotes
- > Dynamic discovery for fast, easy setup
- > "Wi-Fi friendly" channel selection
- > Built-in RF network diagnostics
- > 100 to 200 feet range indoors, 1000 feet outdoors
- > Supports roaming for extended coverage
- > Antenna extendable using optional ANT-EXT
- > Crestron Toolbox™ software configuration and management
- > Cresnet® or Ethernet control system interface
- > Compatible with TPS-6X and UFO-WPR-3ER

The CEN-HPRFGW gateway is a 2-way RF transceiver that enables wireless communication and management for up to 16 Crestron® "Extended Range" wireless touch screens and remotes. It is compatible with the Isys® TPS-6X Wireless Touch Screen and UFO-WPR-3ER Waterproof Wireless Remote.

Extended Range 2.4 GHz RF Technology

Crestron Extended Range wireless technology (formerly called "High Powered RF") affords robust bidirectional wireless communications over an impressive distance of approximately 100 to 200 feet indoors and up to 1000 feet outdoors. Roaming capability allows for even greater coverage using up to eight CEN-HPRFGW gateways. "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.

The CEN-HPRFGW continuously monitors each device on the network, diligently keeping track when any device goes to sleep, shuts down, or wanders out of range, restoring communications seamlessly when the device reappears on the network. The control data to and from each associated device is passed cleanly and quickly through the gateway without any cumbersome processing to affect performance. Excessive network traffic and noise are combated using intelligent data routing to ensure every control signal is delivered intact to its intended destination without interruption.

Easy Setup

Setting up a network of ER wireless devices is simple, utilizing dynamic discovery to locate and acquire each RF device automatically. Up to 16 ER wireless touch screens and remotes can be linked to a control system via a single CEN-HPRFGW gateway. Additional gateways may be installed to support more devices, with up to 16 gateways possible in a complete system (RF conditions allowing).

Wired communications between the CEN-HPRFGW gateway and the control system can be via Cresnet® or Ethernet, with power for the gateway delivered over Cresnet or via the included power pack.



SPECIFICATIONS

Wireless

RF Transceiver: 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), IEEE 802.15.4 compliant

Transmitting Power: 75 mW (Ch.11), 100 mW (Ch.12-23), 15 mW (Ch.24), 3.5 mW (Ch.25), 1 mW (Ch.26) @ High Setting; 1 mW (Ch.11-25), 0.5 mW (Ch.26) @ Low Setting

Range (typical): 100 to 200 feet maximum indoor, 1000 feet outdoor, subject to site-specific conditions

Roaming: Supports roaming amongst up to 8 RF gateways

Maximum 16 "ER" wireless devices per gateway or roaming network

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP

Cresnet®: Supports Cresnet slave mode

Controls and Indicators

PWR: (1) Green LED, indicates DC power supplied from Cresnet network or local power pack

NET: (1) Yellow LED, indicates communication with the Cresnet system

RXD: (1) Red LED, indicates data is being received from wireless network devices

TXD: (1) Red LED, indicates data is being transmitted to wireless network devices

ACQUIRE: (1) Recessed pushbutton with red LED, used to configure the wireless network

SETUP: (1) Recessed pushbutton with red LED, used for touch-settable ID (TSID) and Ethernet autodiscovery

LAN: (2) LEDs, Green indicates Ethernet link status, Yellow indicates Ethernet activity

CEN-HPRFGW Extended Range RF Wireless Gateway

Connectors

LAN: (1) 8-wire RJ45, 10Base-T/100Base-TX Ethernet port

COMPUTER: (1) 6-pin RJ11 female, computer console port;
Bidirectional RS-232 up to 115.2k baud;
Hardware and software handshaking support;
2 ft (0.6 m) RJ11-to-DB9F adapter cable included;
For setup only

NET: (1) 3.5mm detachable terminal block;
Cresnet slave port, connects to Cresnet control network

PWR 12VDC 0.5A: (1) 2.5mm barrel DC power jack;
12 Volt DC power input (power pack included)

Power Requirements

Power Pack (US/North America): 0.5 Amps @ 12 Volts DC;
120 Volts AC, 60 Hz power pack, model PW-1205 included

Power Pack (International): 0.5 Amps @ 12 Volts DC;
230 Volts AC, 50 Hz power pack, model PWI-1215 included

Cresnet Power Usage: 2 Watts (85 mA @ 24 Volts DC) with no power pack connected

Enclosure

Metal, matte black finish, freestanding or surface mount (adhesive feet, 3M™ Dual Lock™ reclosable fastener, and mounting plate included)

Environmental

Temperature: 41° to 104°F (5° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

Dimensions

(Without antenna)

Height: 1.30 in (33 mm);
1.22 (31 mm) without feet

Width: 4.28 in (109 mm)

Depth: 5.60 in (143 mm)

Weight

14.6 oz (414 g)

MODELS & ACCESSORIES

Available Models

CEN-HPRFGW: Extended Range RF Wireless Gateway

CENI-HPRFGW: Extended Range RF Wireless Gateway - International Version, 230V

Included Accessories

PW-1205: Power Pack, Wall, 12VDC, 0.5A, 120VAC (Qty. 1 included with CEN-HPRFGW)

PWI-1215: Power Pack, Desktop, 12VDC, 1.5A, 230VAC (Qty. 1 included with CENI-HPRFGW)

Available Accessories

ANT-EXT-5: 5 ft Antenna Extender

ANT-EXT-10: 10 ft Antenna Extender

CRESNET-NP: Cresnet® Control Cable, non-plenum

CRESNET-P: Cresnet® Control Cable, plenum

CRESNET-HP-NP: Cresnet® “High-Power” Control Cable, non-plenum

Notes:

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.

Specifications subject to change without notice. Crestron is not responsible for errors in typography or photography.

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

Cresnet, Crestron, Crestron Toolbox, Isys, and the Crestron logo are trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. 3M and Dual Lock are either trademarks or registered trademarks of 3M in the United States and/or other countries. Other 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. ©2012 Crestron Electronics, Inc.

CEN-HPRFGW Extended Range RF Wireless Gateway

