

# CEN-HPRFGW

## High Powered RF Gateway

The CEN-HPRFGW gateway is an RF transceiver that enables the Isys™ TPS-6X wireless touchpanel to communicate with a 2-Series control system. "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 affords a range of approximately 100 to 200 feet indoors and up to 1000 feet outdoors. For even greater coverage, the TPS-6X supports roaming amongst up to 8 CEN-HPRFGW gateways.

Up to 16 touchpanels may be associated with any single CEN-HPRFGW gateway. Setup is simple, utilizing dynamic discovery to locate and acquire each touchpanel and gateway automatically. Each wireless connection is monitored continuously, diligently keeping track when touchpanels go to sleep, shut down, or wander out of range, and restoring communications seamlessly when any touchpanel reappears on the network. The control data to and from each associated touchpanel is passed cleanly and quickly through the gateway without any cumbersome processing to effect 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.

- > *2-way RF wireless transceiver/gateway*
- > *Supports up to 16 TPS-6X touchpanels*
- > *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*

## SPECIFICATIONS

### Wireless

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

**RF 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  
Maximum 16 touchpanels per gateway

### Communications

**Ethernet:** 10BaseT/100BaseTX, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP

**Cresnet:** Supports Cresnet slave mode



### Controls and LED 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

### Connectors

**LAN:** (1) 8-wire RJ45 with 2 LED indicators; 10/100BaseT Ethernet port; Green LED indicates link status; Yellow LED indicates Ethernet activity

**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

**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 (**PW-1205** power pack included)

### Power Requirements

**Power Pack:** 0.5 Amps @ 12 Volts DC;

120 Volts AC, 60 Hz power pack, model **PW-1205**, included

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

### Enclosure

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

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## **Environmental**

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**Temperature:** 41° to 104°F (5° to 40°C)  
**Humidity:** 10% to 90% RH (non-condensing)

## **Dimensions**

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(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**

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14.6 oz (414 g)

## **INTERNATIONAL VERSION (230 VAC)**

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### **CENI-HPRFGW**

All the features and specifications of the CEN-HPRFGW except:

## **Power Requirements**

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**Power Pack:** 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

## **Available Models**

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**CEN-HPRFGW:** High Powered RF Gateway  
**CENI-HPRFGW:** High Powered RF Gateway - International Version, 230V

## **Included Accessories**

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**PW-1205** Power Pack, Wall, 12VDC, 0.5A, 120VAC  
[Included Quantity for CEN-HPRFGW: 1]  
**PWI-1215** Power Pack, Desktop, 12VDC, 1.5A, 230VAC  
[Included Quantity for CENI-HPRFGW: 1]

## **Available Accessories**

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**ANT-EXT-5:** 5 ft Antenna Extender  
[Just Released]  
**ANT-EXT-10:** 10 ft Antenna Extender  
[Just Released]  
**CRESNET-NP-TL-B250:** Cresnet® Control Cable, non-plenum, teal, 250 ft box  
**CRESNET-NP-TL-B500:** Cresnet® Control Cable, non-plenum, teal, 500 ft box  
**CRESNET-NP-TL-SP500:** Cresnet® Control Cable, non-plenum, teal, 500 ft spool  
**CRESNET-NP-TL-SP1000:** Cresnet® Control Cable, non-plenum, teal, 1000 ft spool  
**CRESNET-NP-BK-B500:** Cresnet® Control Cable, non-plenum, black, 500 ft box  
**CRESNET-NP-OR-B500:** Cresnet® Control Cable, non-plenum, orange, 500 ft box  
**CRESNET-NP-YL-B500:** Cresnet® Control Cable, non-plenum, yellow, 500 ft box  
**CRESNET-P-TL-SP500:** Cresnet® Control Cable, plenum, teal, 500 ft spool  
**CRESNET-P-TL-SP1000:** Cresnet® Control Cable, plenum, teal, 1000 ft spool  
**CRESNET-P-BK-SP500:** Cresnet® Control Cable, plenum, black, 500 ft spool  
**CRESNET-P-OR-SP500:** Cresnet® Control Cable, plenum, orange, 500 ft spool

**CRESNET-P-YL-SP500:** Cresnet® Control Cable, plenum, yellow, 500 ft spool  
**CRESNET-HP-NP-TL-SP500:** Cresnet® "High-Power" Control Cable, non-plenum, teal, 500 ft spool  
**CRESNET-HP-NP-TL-SP1000:** Cresnet® "High-Power" Control Cable, non-plenum, teal, 1000 ft spool

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