

Crestron Pynɡ[®] Control Hub

- > Communicates with the Crestron Pynɡ[®] App via an internet connection
- > Interfaces with wireless and wired lighting controls, motorized shades, thermostats, security systems, door locks, occupancy sensors, daylight sensors, AV, and other equipment^[2]
- > Built-in infiNET EX[®] wireless network gateway^[1,3]
- > Cresnet[®] master port for wired devices^[1]
- > High-Speed LAN port for Ethernet devices and internet connection
- > Optional COM port expander adds an RS-232 interface for third-party devices^[2]
- > Stores system configuration settings onboard
- > Cloud backup for reliability and serviceability
- > Memory card slot for event logging (Micro SD card not included)
- > Crestron "IFE" Integrator Friendly Enclosure
- > Surface or DIN rail mountable using bracket provided
- > Available rack mount and pole mount options^[2]
- > PoE, Cresnet, or line powered
- > External 100-240 VAC universal power pack included

The Crestron Pynɡ[®] Control Hub (**PYNG-HUB**) communicates with the Crestron Pynɡ App (**CRESTRON-PYNG**) via an internet connection to enable control and monitoring of AV, lights, shades, thermostats, security systems, door locks, occupancy sensors, daylight sensors, and other equipment. It also enables control of the equipment using Crestron[®] touch screens and keypads.

Built-in infiNET EX[®], Cresnet[®], and Ethernet provide both wireless and wired connectivity to support a wide range of Crestron devices.^[1] A variety of third-party devices and services can also connect to the control hub via Ethernet and the Internet, or via RS-232 using the optional COM Port Expander (**PYNG-CONNECT-COM**^[2]).

System setup and configuration is accomplished by a Crestron authorized installer using the Crestron Pynɡ App. Configuration settings are stored onboard the control hub and backed up in the cloud to ensure reliable operation and easy serviceability. Simplified internet access is enabled using the [myCrestron Dynamic DNS Service](#).

SPECIFICATIONS

Wired Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, industry-standard TCP/IP stack, UDP/IP, CIP, DHCP, IEEE 802.3at Type 1 compliant

Cresnet: Cresnet master mode^[1]



Wireless Communications^[1]

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: 50 ft (15 m) to nearest mesh network device(s), subject to site-specific conditions and individual device capabilities, range between floors or ceilings is limited to one level^[3]

Note: Do not rackmount or stack multiple units when using wireless. Use care when positioning the device to avoid interference from nearby RF devices, obstructions, and metal surfaces.

Connectors

MEMORY: (1) Micro SD memory card slot;
Accepts one Micro SD card for storage of log files

COMPUTER: (1) USB Type Micro-B connector, female;
Service port for factory use only

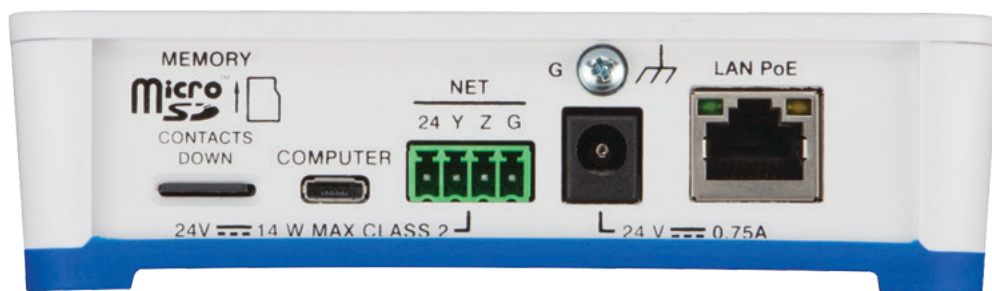
NET: (1) 4-pin 3.5 mm detachable terminal block;
Cresnet master port^[1];
Outputs power to Cresnet devices if the included power pack is connected to the 24 VDC power input jack;
Alternately functions as a Cresnet power input to power the unit from a Cresnet power supply^[2];
See "Power" section below for additional specifications

G: (1) 4-40 screw;
Chassis ground lug

24 VDC 0.75A: (1) 2.1 x 5.5 mm DC power connector;
24 Volt DC power input (power pack included);
Passes through to the NET port to power Cresnet devices;
See "Power" section below for additional specifications

LAN PoE: (1) 8-pin RJ45 connector, female;
10Base-T/100Base-TX Ethernet port;
PoE PD port

PYNG-HUB Crestron Pyng® Control Hub



Rear View

Controls & Indicators

PWR: (1) Green LED, indicates operating power is supplied via PoE, a power pack, or Cresnet

NET: (1) Amber LED, indicates communication with Cresnet devices

PAIR: (1) Red LED, indicates when pairing with an infiNET EX wireless device

HW-R: (1) Pushbutton, initiates hardware reset

SW-R: (1) Pushbutton, initiates software reset

LAN PoE (rear): (1) Green and (1) amber LEDs, green indicates Ethernet link status, amber indicates Ethernet activity

Power

Power Source Options: PoE, power pack, or Cresnet; safe to connect PoE simultaneously with either Cresnet or power pack

Power over Ethernet: IEEE 802.3at Type 1 (802.3af compatible) Class 0 (12.95 W) PoE Powered Device

Power Pack (included):

Input: 0.4 Amps maximum @ 100-240 Volts AC, 50/60 Hz;

Output: 0.75 Amps @ 24 Volts DC;

Model: PW-2407WU

Cresnet Power Usage: 4 Watts (0.17 Amp @ 24 Volts DC) when powered by a Cresnet power supply^[2]

Available Cresnet Power: 14 Watts (0.6 Amp @ 24 Volts DC) when powered by the included power pack

Power Consumption: 4 Watts (not including any connected Cresnet devices)

Environmental

Temperature: 41° to 113° F (5° to 45° C)

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

Heat Dissipation: 14 BTU/hr

Construction

Enclosure: IFE small form factor, white and blue plastic

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, optional rack mount and pole mount kits sold separately

Dimensions

Height: 1.35 in (35 mm); 1.77 in (45 mm) with bracket
Width: 5.04 in (129 mm); 5.36 in (137 mm) with bracket
Depth: 5.04 (129 mm)

Weight

9.9 oz (281 g);
11.3 oz (321 g) with bracket

Compliance

UL Listed for US and Canada, CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

PYNG-HUB: Crestron Pyng® Control Hub

Included Accessories

PW-2407WU: 24 Volt DC Power Pack

Available Accessories

CRESTRON-PYNG: Crestron Pyng® App

PYNG-CONNECT-COM: COM Port Expander for PYNG-HUB

RMK-IFE-1U: IFE Rack Mount Kit

PLMK-IFE-101: IFE Pole Mount Kit

PWE-4803RU: PoE Injector

CEN-SW-POE-5: 5-Port PoE Switch

CEN-SWPOE-16: 16-Port Managed PoE Switch

MYCRESTRON-DDNS: myCrestron Dynamic DNS Service for Crestron Systems

PYNG-HUB Crestron Pyng® Control Hub

Notes:

1. The Cresnet port and infiNET EX transceiver are strictly for use with specific Crestron devices that work with Crestron Pyng. For a list of compatible devices, please visit: <http://www.crestron.com/products/line/crestron-pyng-home-automation-ipad-app>.
2. Item(s) sold separately.
3. The total range of an infiNET EX wireless network is dependent on the placement and capabilities of each network device. A mesh network topology is employed so every "EX" device on the network acts as a routing node or "expander," which relays the signals it receives on to other EX devices within range. This effectively extends the total range of the network and provides multiple redundant signal paths for extra reliability. A maximum of six "hops" across routing nodes is allowed, although a maximum of three is recommended. Please note that battery-powered infiNET EX devices only operate as leaf nodes and do not provide expander functionality. Up to 100 infiNET EX devices are permitted, although best practices suggest a limit of 50. Up to four external gateways (CEN-GWEXER sold separately) may be added to support additional devices (RF conditions allowing). Refer to the "Installation and Setup of Crestron RF Products, Best Practices" guide (Doc # 6689) for additional guidelines.

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.

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

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