

CEN-AVF-HUB

.AV Framework™ Hub

- > Enables Crestron Fusion® enterprise integration for basic rooms and spaces
- > Extremely cost-effective — supplants the need for a control system and programming
- > Supports up to 15 rooms, each with a single display, switcher, and/or AirMedia® [1]
- > Future support for room occupancy sensors via Cresnet® or infiNET EX® [1]
- > Easy setup and configuration via web browser user interface
- > Allows scheduling of system turn on and turn off times
- > Compact, stackable “IFE small” form factor
- > Surface or DIN rail mountable using bracket provided
- > Available rack mount and pole mount options [3]
- > PoE or 24VDC powered (power supply not included)



The .AV Framework™ Hub enables huddle rooms and other meeting spaces with basic or no AV presentation technology to be integrated as part of a complete Crestron Fusion® managed enterprise. A single “AVF Hub” can support up to 15 such rooms, allowing each room’s occupancy [1] and device status to be monitored and managed without the need for any additional control systems or custom programming. Quick setup and configuration is facilitated through an easy-to-use web browser interface.

Please note, occupancy sensing is not currently supported and will be enabled, along with other features and functions, through future firmware updates.

Enterprise Management Bridge for AV Presentation Systems

The AVF Hub provides a bridge to Crestron Fusion for the Crestron® HD-MD-400-C-E HD Scaling Presentation Switcher & Extender system, the AM-101 AirMedia® Presentation Gateway [2], and third-party Crestron Connected® display devices. Each device simply communicates with the AVF Hub over Ethernet.

Used with an HD-MD-400-C-E, the AVF Hub enables the following functionality:

- Reports the currently selected input source
- Controls display device power via CEC or RS-232 (or Ethernet for Crestron Connected displays) when an input source is connected or disconnected
- Monitors display power status via CEC or Ethernet
- Allows scheduling of system turn on and turn off times via the web browser interface

- Reports and logs display and source device usage
- Reports various errors to facilitate help desk troubleshooting and enable alert messaging via Crestron Fusion
- Supports up to 15 rooms, each with one HD-MD-400-C-E switcher, one display device, and one optional AM-101 [2]
- Also supports rooms with just a Crestron Connected display and optional AM-101 [2]

Support for additional devices and functions will be enabled in the future.

Integrator Friendly Enclosure

The CEN-AVF-HUB features the Crestron IFE form factor, a compact “Integrator Friendly Enclosure” design that fits almost anywhere and enables a variety of installation options. Its shape allows multiple AVF Hubs and other IFE compliant devices to be stacked together. Using the included mounting bracket, it can be fastened to any flat surface or snapped onto a standard DIN rail. Rack mount and pole mount kits are also available separately.

Power over Ethernet

The CEN-AVF-HUB can be powered through its Ethernet connection using PoE technology. This allows the AVF Hub to be installed in closets and other locations that lack an AC power outlet. To take advantage of this feature, Crestron offers the PWE-4803RU PoE Injector [3], which simply connects in line with the Ethernet cable. Crestron also offers Ethernet switches with built-in PoE (models CEN-SW-POE-5 or CEN-SWPOE-16 [3]), affording a complete high-performance networking solution capable of powering multiple PoE powered devices.

CEN-AVF-HUB .AV Framework™ Hub



Front View



Rear View

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, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, IPv4 or IPv6, Active Directory authentication, IIS v.6.0 web server, SMTP e-mail client, 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
Transmit Power: +20 dBm (US/NA model CEN-AVF-HUB);
+8 dBm (International model CENI-AVF-HUB)

Range (typical): 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^[4]

Note: Do not rackmount or stack multiple units when using wireless.

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 a 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^[3];
See "Power" section below for additional specifications

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

G: (1) 4-40 screw, chassis ground lug

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

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) Recessed pushbutton for hardware reset

SW-R: (1) Recessed pushbutton for 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; power sources not included; safe to connect multiple power sources

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

Power Pack: 0.75 Amps @ 24 Volts DC, power pack model PW-2407WU sold separately

Cresnet Power Usage: 4 Watts (0.17 Amp @ 24 Volts DC)^[1]

Available Cresnet Power: 14 Watts (0.6 Amp @ 24 Volts DC) when powered by a 24 VDC power pack^[1]

Power Consumption: 4 Watts (not including any connected Cresnet devices)^[1]

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, black 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 in (129 mm)

CEN-AVF-HUB .AV Framework™ Hub



Shown with mounting bracket

Weight

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

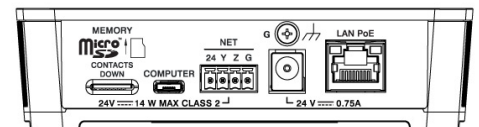
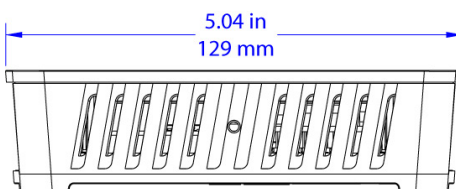
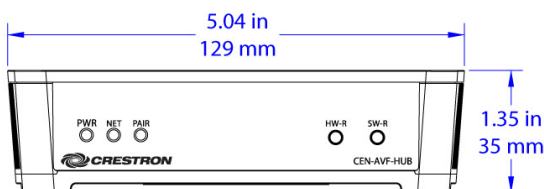
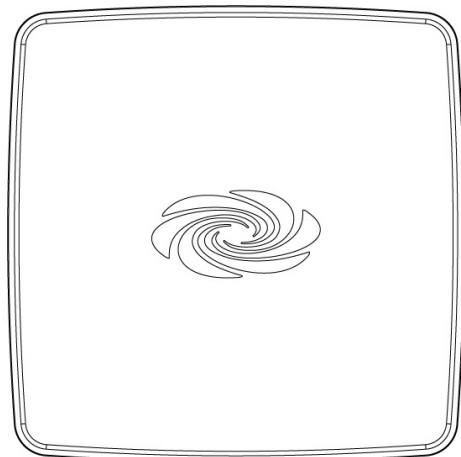
Compliance

CEN-AVF-HUB: UL Listed for US and Canada, IC, FCC Part 15 Class B digital device
CENI-AVF-HUB: CE, EAC, C-Tick

MODELS & ACCESSORIES

Available Models

CEN-AVF-HUB: .AV Framework™ Hub
CENI-AVF-HUB: .AV Framework™ Hub – International Version



Available Accessories

RMK-IFE-1U: IFE Rack Mount Kit
PLMK-IFE-101: IFE Pole Mount Kit
CLW-EXPEX: infiNET EX® Wireless Expander
GLA-EXPEX: Crestron Green Light® Wireless Expander for infiNET EX® Networks
PWE-4803RU: PoE Injector
CEN-SW-POE-5: 5-Port PoE Switch
CEN-SWPOE-16: 16-Port Managed PoE Switch
PW-2407WU: 24 Volt DC Power Pack

Notes:

1. Occupancy sensing, Cresnet communication, and infiNET EX wireless communication are not currently supported and will be enabled via future firmware updates. When that functionality is enabled, the Cresnet port and infiNET EX transceiver will be strictly for use with specific Crestron occupancy sensors and other specific devices. The CEN-AVF-HUB will not function as a general purpose infiNET EX gateway or Ethernet-to-Cresnet bridge.
2. Use with the AM-101 AirMedia Presentation Gateway requires use of the AirMedia Windows® or OS X® Deployable Application, or the [Crestron PinPoint™ App](#).
3. Item(s) sold separately.
4. 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 each "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. If needed, up to five dedicated infiNET EX expanders (models [CLW-EXPEX](#) or [GLA-EXPEX](#), sold separately), may be deployed as supplemental routing nodes to fill any gaps in coverage. Up to 100 infiNET EX devices are permitted per gateway, although best practices suggest a limit of 50. 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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