# DIN-HUB

## **DIN Rail Cresnet® Distribution Hub**

- > 3-segment Cresnet hub
- > For Cresnet networks with more than 20 devices
- > Configurable power distribution
- > No programming required
- > 6M wide DIN rail mounting

The DIN-HUB is a DIN rail-mounted Cresnet hub designed to facilitate the configuration of large Cresnet networks. DIN rail mounting enables modular installation alongside Crestron DIN Rail lighting and automation control modules and other third-party DIN rail mountable devices.

#### **3-Segment Cresnet® Hub**

Cresnet is the communications backbone for Crestron lighting modules, wall box dimmers, shade controllers, thermostats, keypads, touchpanels, and many other devices. This flexible 4-wire bus normally supports approximately 20 Cresnet devices without requiring a hub. Larger systems are easily enabled by adding the DIN-HUB. The DIN-HUB features 3 isolated Cresnet segments, each supporting an additional 20 devices, allowing for systems of approximately 80 devices total (including the "host" segment). More hubs may be added to allow up to a maximum potential of 252 devices.\*

#### **Cresnet Power Distribution**

In addition to data, Cresnet carries 24 Volts DC for powering the devices connected to it. The DIN-HUB provides an easy way to manage the distribution of power for a complete Cresnet network. Each segment can be configured to receive its power from the "host" power source or from another power supply. Separate power supplies may be dedicated to each segment, or a single supply can be shared amongst multiple segments as needed. Each segment supports up to 75 Watts.

#### **DIN Rail Installation**

The DIN-HUB is designed to snap onto a standard DIN rail for installation in a wall mount enclosure or mounted on a wall panel. Wiring connections are made using detachable screw terminals positioned along the top and bottom, clearly accessible from the front for easy installation and servicing. Diagnostic indicators are positioned on the center front panel. When installed in an enclosure utilizing 45 mm cutouts, the DIN-HUB's front panel stays visible while the connections are concealed.

## **SPECIFICATIONS**

#### Connections

NET HOST: (2) 4-pin 3.5mm detachable terminal blocks, paralleled; Connects to Master NET port of DIN-AP2 or other control system, and loops thru to additional DIN Rail Cresnet devices

**NET PWR INPUT 24VDC, NET A** – **C**: (3) 3-pin 3.5mm detachable terminal blocks; Cresnet power selection connectors for each segment; Connect to external Cresnet power supplies, or to "host" power source via jumpers, to power Cresnet devices connected to the NET A-C ports;

Maximum Load per Segment: 75 Watts (3.13 Amps @ 24 Volts DC)



**NET A** – **C:** (6) 4-pin 3.5mm detachable terminal blocks comprising (2) Cresnet ports (paralleled) per each of (3) segments

#### **LED** Indicators

**NET HOST, PWR:** (1 Green) Indicates Cresnet power is supplied to unit via either NET HOST port

**NET HOST, NET:** (1 Yellow) Indicates Cresnet bus activity at either NET HOST port

**NET A – C, PWR:** (3 Green) Indicate Cresnet power is available at NET ports of corresponding hub segment

**NET A** – **C, NET:** (3 Yellow) Indicate Cresnet bus activity at NET ports of corresponding hub segment

#### **Power Requirements**

Cresnet Power Usage: 0.6 Watts (0.03 Amps @ 24 Volts DC)

#### Environmental

Temperature: 32° to 104° F (0° to 40° C) Humidity: 10% to 90% RH (non-condensing) Heat Dissipation: 2 BTU/hr

#### Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0 rated, 35mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45mm front panel cutout, occupies 6 DIN module spaces (108mm)

#### Dimensions

Height: 3.71 in (9.42 cm) Width: 4.18 in (10.60 cm) Depth: 2.28 in (5.80 cm)



### Weight

#### 6.0 oz (169 g)

\* The actual number of possible devices per segment and per network may vary depending upon the length and geometry of network wiring, and the power requirements of every device. A general rule of thumb suggests approximately 20 devices, an aggregate of 3000 feet of cable, and up to a 75 Watt load per segment (wiring and devices permitting). In any case, 252 is the maximum number of possible devices on a complete Cresnet network. Contact Crestron True Blue Support for further design assistance.

## **MODELS & ACCESSORIES**

#### **Available Models**

DIN-HUB: DIN-Rail Cresnet® Distribution Hub



## **APPLICATION DIAGRAM**

