

RS-485 NETWORK HUB CA-A370-P

The CA-A370-P Network Hub allows you to wire an RS-485 network in a star configuration along a new or existing RS-485 network without affecting the performance of the main network or devices connected to it. The CA-A370-P has 4 "slave" ports that are completely independent of one another. Using the CA-A370-P provides higher network isolation from noise thus greatly increasing communications reliability. The CA-A370-P simplifies installation, and makes running an RS-485 network more cost-effective by reducing wiring and installation time.



- RS-485 "star" configuration is a snap
- · Provides a higher network isolation from noise
- · LED status indicators for power, network and port activity
- Create 4 independent RS-485 networks
- Connects to the CT-V900-A RS-485 and E-Bus communication ports
- Connect controllers or expansion modules up to 1220m (4000ft) from the hub

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MODULE DESCRIPTION

CA-A370-P in "Daisy Chain"

Up to eight CA-A370-P's can be connected in "daisy chain" fashion. The "slave" port of one CA-A370-P simply becomes the "master input" of the next one. The distance between each CA-A370-P should not exceed 4000 feet (1220m). Please follow the installation instructions to ensure that the correct EOL terminations are selected.

Master Input

The "master input" port can be connected anywhere along the "daisy chain" of an existing or new RS-485 network. In a typical system, the "master input" is connected to the RS-485 network in the same manner as a CT-V900-A controller. Data received from the controllers connected to any of the 4 "slave" ports of the CA-A370-P is transmitted via the "master input" port to the access control PC. Please follow the installation instructions to ensure that the correct EOL terminations are selected. The distance between the access control PC and the "master input" of the first CA-A370-P should not exceed 4000 feet (1220m).

"Slave" ports 1-4

"Slave" ports allow you to branch off the main RS-485 network to reduce wiring and installation time. Up to 32 devices can be connected in a "daisy chain" to each "slave" port. The first controller connected to a "slave" port is wired in the same manner as the CT-V900-A controller. See wiring diagram, the correct termination must be selected for each "slave" port. The distance of each "slave" network should not exceed 4000 feet (1220m). Please follow the installation instructions to ensure that the correct EOL terminations are selected.

Power requirements

Power is applied to the unit through the 12V and GND Inputs.

LED Indicators

The CA-A370-P has 10 on-board status indicators to show power, network activity and port activity.

Power

The ORANGE power LED indicates that the board is being supplied with power and should be continuously illuminated.

Activity

The RED activity LED indicates that the HUB is active in either broadcasting network messages to the "slave" ports or is receiving data from the "slave" ports.

Traffic 1-4

The 4 GREEN traffic LEDs indicate that a device on the corresponding "slave" port is broadcasting information to the "master input" port. This will also be indicated by the master activity LED illuminating in unison.

Fault 1-4

The 4 RED fault LEDs indicate that a fault condition has occurred and needs to be checked on the corresponding "slave" port.



SPECIFICATIONS

- Power Requirements: 10 to 14.6Vdc
- Current consumption: 190 mA typical
- -10°C to 55°C (14°F to 131°F) • Operating temp:
- Humidity (non-condensing):

0-95%

• PCB dimensions: 14cm(L) x 7.6cm(H)

- Maximum devices per slave port:
- Termination:
- LED indicators:
- 120 Ohms balanced
- 1 Orange Power
- 1 Red "Master" port activity
- 4 Green "Slave" port activity
- 4 Red "Channel Fault"

Recommanded cable: 2 twisted pairs UTP (Cat 5)

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WIRING DIAGRAM



