



## **CR-2 Character Repeater For RS232, RS422 and RS485 2 or 4-wire**



### **FEATURES**

- Repeats RS232, RS422, RS485 data
- Regenerates asynchronous characters
- Industrial rated temperature from -40 to +75 C
- Two asynchronous serial ports
- RS232, RS422, or RS485 2-wire or 4-wire
- Ports speeds to 57.6 Kbps
- Works in Point-to-point and multipoint applications
- Easy to setup and maintain
- Configuration via serial or ethernet port
- Use to regenerate over-sampled data
- Compact size; stand-alone or rack mounting
- AC and/or DC power supply
- User name and password option for configuration authority
- ROHS, CE

### **DESCRIPTION**

The CR-2 regenerates asynchronous data. The CR-2 uses UARTs in addition to RS232 and RS485 2-wire or 4-wire drivers and receivers (The CR-2 is RS422 compatible using the RS485 4-wire setting). The CR-2 regenerates both the electrical signals and the characters.

Regenerating characters is useful when back to back links that user over-sampling are tied together. For example, over sampling 19200 bps asynchronous data over a 56 kbps synchronous circuit will shorten or lengthen each 1 or 0 by up to 34%. Receiving devices will typically correctly recover the data with 34% bit length distortion. However, back to back over sampled links can add another 34% bit distortion, for a total of 68%. A bit distortion of 68% results in bit errors.

The CR-2 removes async bit distortion by regenerating the characters. Each of the bits of a character coming out of an asynchronous UART have the same time duration.

The CR-2 is shipped set to RS232. The user can option the CR-2 for RS422/485 4-wire operation or for RS485 2-wire operation.

**Need a Special Option?  
Custom Defaults?  
Unusual or Unique Application?**

**Call DCB... 1-800-432-2638**

## CR-2 Character Repeater

### SPECIFICATIONS

#### General

Two asynchronous RS232, RS422, or RS485 (2 or 4-wire serial ports):

- DE-9P (PC-9 pin) connectors, DTE interface
- Speeds to 57.6 Kbps, full or half duplex
- Can be configured via RS232 serial port
- Ethernet port for telnet or web browser management
- Use for regenerating over-sampled asynchronous characters

#### Indicators

Status, Port Activity (2), LAN status

#### Controls

Switch to invoke serial port setup

User name and password option for configuration authority

#### Physical/Electrical

- Power Requirements: 9 to 30 VDC, 2 watts
- 48, 125 VDC and 240 VAC options are available
- Supplied with 120 VAC external power supply
- Dimensions: 4 1/4" x 3" x 1"
- 7.5 oz.
- Din clip mounting available
- ROHS, CE

#### Environmental

Operational Temperature: - 40 to +75 C, non-condensing humidity



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### APPLICATION

