

## RS422/485 to RS232 Interface Converter



### CAT-285



- ✓ User Selectable RS422 or RS485
- ✓ RS485 User Selectable 2 or 4-Wire Operation
- ✓ Intelligent Control of RS485 Transmitter and Receiver
- ✓ Td and Rd LED Indicators
- ✓ DTE/DCE Compatible
- ✓ Data Rates up to 64k BPS



CAT285 shown smaller than actual size.

The CAT-285 is a unique interface converter that can be configured by the user to convert either RS422 or RS485 to RS232. When operating in RS485 mode, the CAT-285 has an "intelligent" mode which provides control of the RS-485 line.

When configured to operate as an RS232 to RS422 interface converter, the CAT-285 converts full duplex data, Td and Rd, between RS232 and RS422.

As an RS232 to RS485 converter, the unit can be configured for either 2 or 4-wire operation. In either mode, the CAT-285 allows control of the transmitter so that multi-dropped operation can be accommodated. The CAT-285 can be configured to control its data flow in one of two ways. The first is via the use of RTS, pin 4, of the RS232 port. In this case, the RS485 transmitter will turn ON when RTS is turned on. When RTS is OFF, the CAT-285 is in the receive mode. In the 4-wire mode, the receiver is always on. The second method of controlling the RS485 transmitter is to turn it on when Td data is applied to the RS232 port.

The receiver also operates differently depending on whether the mode is 2 or 4-wire. In the 2-wire mode, when no data is received by the RS232 receiver, the RS485

receiver is switched ON. When data is detected for transmission, the receiver is switched OFF. In the 4-wire mode, the RS485 receiver is constantly ON while the transmitter is switched as required.

The CAT-285 is equipped with a five position dip switch that is used to select the following:

- RS422 mode: 4-wire
- RS485 mode: 2-wire
- RS485 mode: 4-wire
- RS485 mode: controlled by RTS
- RS485 mode: controlled by data
- 220 Ω terminator: in or out

The CAT-285 is also equipped with a DTE/DCE switch to allow reversing pins 2 and 3 on the RS232 interface. Td and Rd LED indicators help verify operation.

### Specifications

**Interface:** RS232, conforms to CCITT V.24; pins 2 and 3 (transmit/receive data) switch selectable, pin 4 (RTS) tied to pin 5 (CTS), pins 6 (DSR), 8 (DCD) and pin 20 (DTR) are connected together; RS422 or RS485, selectable

**Connectors:** RS232, DB-25 male, RS422/485, 5-position terminal block

**Indicators:** 2 LEDs, Td and Rd

**Switches:** DTE/DCE switch selectable for reversing Td and Rd; 5-position dip switch set RS422/485 operation and termination

**Data Rate:** 0 to 64k bps

**MTBF:** 596,000 hours

**Power:** 115 Vac at 60 Hz

**Dimensions:** 0.875 x 2 x 3.5"D

**Operating Ambient:** 0 to 50°C (32 to 122°F); 5 to 95% RH, non-condensing



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

### To Order

Model No.	Description
CAT-285	RS422/485 to RS232 interface converter

**Ordering Example:** CAT-285, RS422/485 to RS232 converter and OCW-1, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 2 years.