

# RS-422/485 to RS-232 Interface Converter



CAT-285  
\$189

- ✓ User Selectable RS-422 or RS-485
- ✓ RS-485 User Selectable 2 or 4-Wire Operation
- ✓ Intelligent Control of RS-485 Transmitter and Receiver
- ✓ Td and Rd LED Indicators
- ✓ DTE/DCE Compatible
- ✓ Data Rates up to 64k BPS

The CAT-285 is a unique interface converter that can be configured by the user to convert either RS-422 or RS-485 to RS-232. When operating in RS-485 mode, the CAT-285 has an "intelligent" mode which provides control of the RS-485 line.

When configured to operate as an RS-232 to RS-422 interface converter, the CAT-285 converts full duplex data, Td and Rd, between RS-232 and RS-422.

As an RS-232 to RS-485 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 RS-232 port. In this case, the RS-485 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 RS-485 transmitter is to turn it on when Td data is applied to the RS-232 port.



CAT-285, \$189, shown smaller than actual size

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 RS-232 receiver, the RS-485 receiver is switched ON. When data is detected for transmission, the receiver is switched OFF. In the 4-wire mode, the RS-485 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:

- RS-422 mode: 4-wire
- RS-485 mode: 2-wire
- RS-485 mode: 4-wire
- RS-485 mode: controlled by RTS
- RS-485 mode: controlled by data
- 220 ohm terminator: in or out

The CAT-285 is also equipped with a DTE/DCE switch to allow reversing pins 2 and 3 on the RS-232 interface. Td and Rd LED indicators help verify operation.

## Specifications

**Interface:** RS-232, 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; RS-422 or RS-485, selectable

**Connectors:** RS-232, DB-25 male, RS-422/485, 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 RS-422/485 operation and termination

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

**MTBF:** 596,000 hours

**Power:** 115 Vac at 60 Hz

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

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

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## To Order (Specify Model Number)

Model No.	Price	Description
CAT-285	\$189	RS-422/485 to RS-232 interface converter

**Ordering Example:** CAT-285, RS-422/485 to RS-232 converter, \$189.



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