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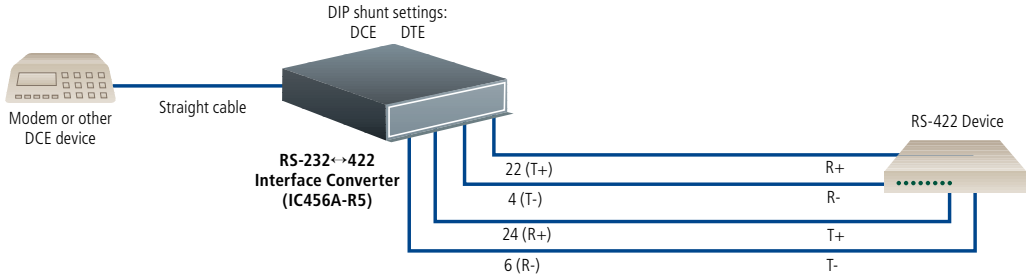
RS-232↔RS-422 Interface Converters

Connect RS-422 modem equipment to RS-232 terminal equipment (DCE to DTE) or RS-232 modem equipment to RS-422 terminal equipment (DCE to DTE) for bidirectional data transfer.

FEATURES

- Use your RS-232 equipment with RS-422/449 RS-449 equipment.
- Provides bidirectional sync or async conversion of all commonly used RS-232 and RS-422 signals.
- Choose from two user-selectable configurations.
- User-selectable DCE or DTE configuration.
- Speed up to 64 kbps.
- Perfect for industrial applications.

Connect your RS-232 equipment to your RS-422/449 equipment via the converter.



OVERVIEW

The RS-232˙RS-422 Interface Converter provides bidirectional synchronous or asynchronous conversion of all commonly used RS-232 and RS-422 signals. It is designed to operate with one port configured as Data Terminal Equipment (DTE) and the other port as Data Communications Equipment (DCE).

The converter has two user-selectable configurations: one for connecting RS-422 modem equipment to RS-232 terminal equipment (DCE to DTE) and one for connecting RS-232 modem equipment to RS-422 terminal equipment (DCE to DTE). Both configurations allow bidirectional data transfer.

Three models are available:

- A standalone unit for 115-VAC operation (IC456A-R5).
- A standalone unit for 230-VAC operation (IC456AE-R3).
- A printed circuit card for rackmounted units (IC456C-R5).

The same RS-232˙RS-422 printed circuit card is used for both 115- and 230-VAC applications, since the card itself derives power from the rack unit in which it is installed.

You might want to order the Interface Converter Rack (RM060), which is a 19-inch rack that can hold up to eight printed circuit cards. The rack has its own power supply that is switch-selectable between 115 and 230 VAC. (For 48 VDC, use RM062A).

The converter has seven LEDs located on the front panel that indicate the status of the input signals.

There are LEDs for DSR (Data Set Ready), CTS (Clear To Send), and Data to show the conditions on the RS-232 interface, and a duplicate set of LEDs to show the conditions on the RS-422 interface. There's also an LED to indicate PWR (power).

TYPICAL APPLICATION

Connect an industrial controller's RS-422 interface to your computer's RS-232 interface.

Technically Speaking

The converter is easy to set for DCE or DTE operation. Simply install the DIP shunts in the correct sockets on the circuit board.

One configuration is for connecting RS-422 DCE to RS-232 DTE. The other configuration is for connecting RS-232 DCE to RS-422 DTE.

There is also a receiver termination switch on the circuit board. It has a termination switch to insert 120-ohm resistance between the receive data input leads. To enable termination, set the switch to the ON position. To disable termination, set the switch to the OFF position.

IC456A-R5

TECH SPECS

Controls — RS-232 port: DTE/DCE DIP shunts;
RS-422 port: DTE/DCE DIP shunts;
Slide switch to enable receiver termination
Temperature — Storage: -4 to +158°F (-20 to +70°C);
Operating: 32 to 122°F (0 to 50°C)
Speed — 64,000 bps, max.
Connectors — RS-232 port: DB25 female;
RS-422 port: DB37 female
Indicators — 7 LEDs show status of RS-232 and RS-422 signals and indicate power ON. RS-232 port: DSR, CTS, DATA; RS-422 port: DSR, CTS, DATA
Power — 115 VAC supply: ±10%, 100 mA;
230 VAC supply: ±10%, 50 mA
Size — Standalone: 2.3"H x 8"W x 11.9"D (5.8 x 20.3 x 30.2 cm);
Rackmount: 1.2"H x 7.5"W x 11.4"D (3 x 19.1 x 29 cm)
Weight — Standalone: 2 lb. (0.9 kg);
Rackmount: 10 oz. (283.5 g)

Additional equipment you may need

- ✦ RS-232 Cable
- ✦ DB37 (RS-442/449) Cable
- ✦ Modem eliminator if you want to connect two DTEs together through the converter
- ✦ Crossover cable if you want to connect two DCEs together through the converter

Item	Code
RS-232↔RS-422 Interface Converters	
Standalone, 115 VAC	**IC456A-R5**
Standalone, 230 VAC	**IC456AE-R3**
Rackmount Card	**IC456C-R5**
You may also need...	
Standard RS-232 Low-Noise Cable	**ECM25T**
DB37 Interface Cable	**EDN37T**

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