RS-232↔RS-422/485 (Data Only) Converter

Send your data up to 4000 feet over the RS-422/485 interface at speeds up to 64 kbps.

232 ↔ 422 / 485 CONVERTER
DATA ONLY

RX TX

PWR

BLACK BOX®

FEATURES

» Operates full-duplex over four wires.
» Transparent to data format and data rates up to 64 kbps.
» Perfect for point-to-point and multipoint applications.
» Daisychain up to 64 converters in multipoint applications.
» Standalone version available for 115- or 230-VAC power.
» Rackmount card also available.

OVERVIEW

The RS-232↔RS-422/485 (Data Only) Converter operates in full-duplex mode over 4-wire lines, and it's transparent to data format and data rates up to 64 kbps.

A 4-position terminal block on the RS-422/485 port makes installation a breeze. And this converter is flexible, too—it can work in either point-to-point or multipoint applications.

You can set the RS-232 interface as either Data Terminal Equipment (DTE) or Data Communications Equipment (DCE) for a wide range of applications.

The RS-232↔RS-422/485 (Data Only) Converter is available either as a standalone unit or rack card. Choose your standalone unit for 115- or 230-VAC power.

You can transmit data up to 4000 feet (1219.2 m) over the RS-422/485 interface. And in a multipoint application, up to 64 converters can be daisychained.

TECH SPECS

Compliance — CE; FCC Part 15 Subpart B Class A, IC Class/classe A
Data Format — Transparent to data format
Data Rate — Transparent to data rates up to 64 kbps
Distance (Maximum) — RS-232: 50 ft. (15.2 m) to attached device; RS-422/485: 4000 ft. (1219.2 m) to farthest attached device
Flow Control — Transparent to software flow control; holds RS-232 hardware flow control outputs high, but can be set so that RS-232 hardware flow control inputs (DTR or RTS) enable the RS-422/485 driver
Humidity Tolerance — Up to 95%, noncondensing
Leads/Signals Supported — RS-232: Pins 1 through 8 and 20 (PGND, TD, RD, RTS, CTS, DSR, SGND, DCD, DTR); RS-422/485: TXA, TXB, RXA, RXB
MTBF — 200,000 hours
Operating Temperature Tolerance — 32 to 122°F (0 to 50°C)
Operation — RS-422/485: 4-wire full-duplex, point-to-point or multipoint
Protocol — Async
User Controls — All board-mounted: (1) 8-position DIP switch jumper for DTE vs. DCE;
(1) 1-position DIP switch for RS-422/485 termination;
(1) jumper for RS-422/485 always on vs. controlled;
(1) jumper for RS-422/485 controlled by DTR vs. RTS;
(1) jumper/solder terminal for interconnection of frame ground and RS-232 signal ground
Interface — TIA/EIA RS-232, DTE or DCE (user-selectable); TIA/EIA RS-422/485
Connectors — RS-232: (1) DB25 F; RS-422/485: (1) 4-position terminal block
Indicators — (3) front-mounted LEDs: TX, RX, Power
Power — IC107A-R3 120 VAC, 60 Hz;
IC107AE-R3: 230 VAC, 50 Hz;
IC107C-R3: 17 VDC CT at 700 mA from the RM005 rack
Size — IC107A-R3, IC107AE-R3: 1.75"H (1U) x 5.5"W x 9"D (4.4 x 14 x 22.9 cm);
IC107C-R3: 4.7"H x 7.4"D (11.9 x 18.8 cm)
Weight — IC107A-R3, IC107AE-R3: Enclosure: 1 lb. (0.5 kg);
Power supply: 0.5 lb. (0.2 kg);
IC107C-R3: 0.5 lb. (0.2 kg)

What's included

✦ Standalone converter or rackmount card version
✦ 115- or 230-VAC wallmount power supply (standalone version only)
✦ Users' manual

Item	Code
RS-232↔RS-422/485 (Data Only) Converter	
Standalone	
115-VAC	**IC107A-R3**
230-VAC	**IC107AE-R3**
Rackmount Card (115-VAC)	**IC107C-R3**
To rackmount your cards, order…	
16-Card Rack	**RM005**
You may also want to order cable…	
RS-232 Cable, 25-Conductor, 10-ft. (3-m), Male/Male	**ECM25C-0010-MM**
AT® Modem Cable, 9-Conductor, 6-ft. (1.8-m), DB9 Female/DB25 Male	**EVMBMC-0006**