

Isolated RS-232 to RS-422/485 Converter

This rugged panel-mount converter offers 2-kV isolation.



FEATURES

- » Designed and tested to meet heavy industrial EMC standards and temperature extremes.
- » Supports up to 1280 x 1024 resolution at 60 Hz.
- » Features 10–30-VDC operation and withstands temperature extremes of -40 to +176° F (-40 to +80° C).
- » Designed to protect expensive control equipment.
- » Three-way isolation, 1000-V input/output.
- » Offers 2-kV isolation with ESD protection.
- » UL® approved.
- » 8-kV contact; 15-kV air.
- » Built-in switchable bias and termination.
- » Converts unbalanced half- or full-duplex RS-232 signals to balanced full-duplex RS-422 or 2-wire half- or 4-wire full-duplex RS-485.
- » Rugged IP30-rated metal case.
- » Supports wide range of data rates.
- » Includes mounting ears for attaching to a panel.
- » Can also be conveniently mounted on a DIN rail with our optional clip.



ICD400A mounted on a DIN rail

OVERVIEW

The RS-232 to RS-422/485 serial converters are compact and tough. Each model is designed and tested to meet heavy industrial EMC standards. The RS-232 signal is connected through a female DB9 connector. The RS-422/485 (2-wire and 4-wire) signal is connected through a five-position removable terminal block, making wiring easy. Power is connected through a two-position removable terminal block. Our bit-wise-enabled circuitry automatically detects the character time-out, eliminating the need to set DIP switches for the baud rate.

The ICD400A offers 2-kV Isolation and will stand up to -40 to +176° F (-40 to +80° C) temperature variations. It protects your expensive control equipment.

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application. Don't waste time and money—call Black Box today.

TECH SPECS

Bias — 1 K-ohm switchable
Data Rate — 460.8 kbps
Enclosure — IP 30, metal
Industrial Bus — Modbus ASCII/RTU
Isolation — 2 kV
MTBF — 217576 hours
MTBF Calculation Method — MIL 217F parts count reliability
Operation — RS-232: Half- or full-duplex;
RS-422: Full-duplex;
RS-485: 2-wire half-duplex or 4-wire full-duplex
RS-232 — TD, RD, GND
RS-422/485 4-Wire — TDA(-), RDA(-), TDB(+), RDB(+), GND
RS-485 2-Wire — DATA A(-), DATA B(+), GND
Surge Protection — ± 0.5-kV DC ports, ± 1-kV signal ports
Termination — 120-ohm switchable
Connectors — (1) 5-position terminal block (RS-422/485),
(1) DB9 F (RS-232 DCE), (1) 2-position terminal block
(power)
Indicators — (2) green TD/RD LEDs (Also used to indicate power)
Temperature Tolerance — Operating: -40 to +176° F (-40 to +80° C);
Storage: -40 to +185° F (-40 to +85° C)
Operating Humidity — Up to 95%, noncondensing
Power — Input voltage: 10 to 30 VDC;
Consumption: 1.0 watt maximum;
External power supply: 24 VDC, 7.5 W
Size — 3.9"H x 2.9"W x 0.9"D x (9.9 x 7.4 x 2.3 cm)
Weight — 0.33 lb. (0.15 kg)

What's included

- ◆ RS-232 to RS-422/485 Converter
- ◆ A printed quick start guide
- ◆ 10-to 30-VDC power connector

Item

Isolated RS-232 to RS-422/485 Converter

You might also need...

DIN Rail Clip

Code

ICD400A

DRCLIP