

Industrial DIN Rail Converter, Repeaters, and Fiber Driver

**DIN rail workhorses with
 UL approval, three-way isolation,
 and rugged durability in
 temperature extremes.**



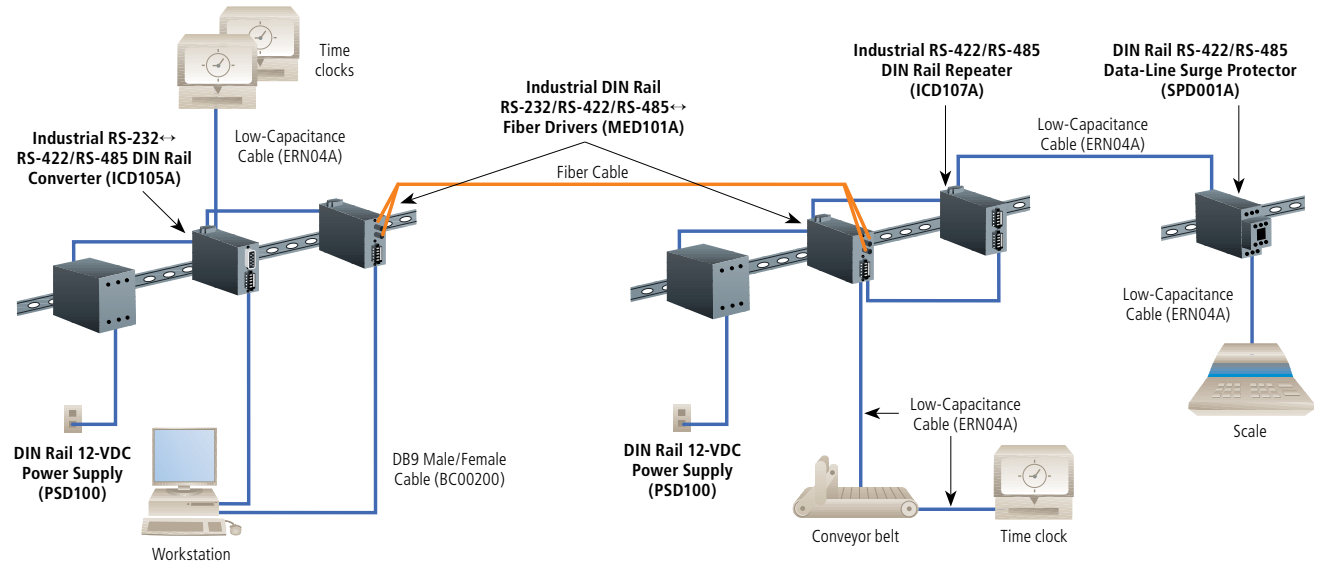
FEATURES

- » All products are UL approved.
- » All products offer three-way isolation, 2000-V input/output.
- » All products operate from -40 to +185°F (-40 to +85°C).
- » The Industrial DIN Rail Converter 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.
- » Both Industrial DIN Rail Repeaters boost your data signals, feature optical isolation, and include 600 W of surge suppression.
- » The Industrial DIN Rail Fiber Driver enables any two async serial devices to communicate half- or full duplex over two multimode ST fibers at distances up to 2.5 miles (4 km).



ICD105A

Our DIN rail solutions in an industrial setting.



OVERVIEW

Industrial RS-232 to RS-422/RS-485 DIN Rail Converter

- UL® approved.
- Three-way isolation, 2000-V input/output.
- Operates from -40 to +185°F (-40 to +85°C).
- 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.
- Extends communications up to 4000 feet (1219.2 m).
- Features addressing up to 32 nodes.

Industrial RS-422/RS-485 DIN Rail Repeater

- UL approved.
- Three-way isolation, 2000-V input/output.
- Operates from -40 to +185°F (-40 to +85°C).
- Features optical isolation plus 600 W of surge suppression.
- Adds 4000 feet (1219.2 m) and another 32 nodes to an RS-485 data circuit. Configure one side as RS-422 and the other side as RS-485 to enable a 4-wire RS-422 device to communicate with a 2-wire RS-485 device.

Industrial RS-232 DIN Rail Repeater

- UL approved.
- Three-way isolation, 2000-V input/output.
- Operates from -40 to +185°F (-40 to +85°C).
- Features optical isolation plus 600 W of surge suppression.
- Isolates the TD, RD, RTS, and CTS channels.
- Modbus ASCII or RTU compatible.
- Automatic Send Data Control eliminates the need for driver software.

Industrial DIN Rail RS-232/RS-422/RS-485 to Fiber Driver

- UL approved.
- Three-way isolation, 2000-V input/output.
- Operates from -40 to +185°F (-40 to +85°C).
- Enables any two async serial devices to communicate half- or full duplex over two multimode ST fibers at distances up to 2.5 miles (4 km).
- RS-232 signals are supported up to 115.2 kbps; RS-422 or RS-485 signals are supported up to 460.8 kbps.



ICD105A



ICD108A



MED101A

TECH SPECS

Distance (Maximum) — ICD105A, ICD107A: 4000 ft. (1219.2 m);
ICD108A: 50 ft. (15.2 m);
MED101A: 2.5 mi. (4 km)

Operation — ICD105A: RS-232: Half- or full duplex;
RS-422: Full duplex;
RS-485: 2-wire half-duplex or 4-wire full duplex;
ICD107A: RS-422: Full duplex;
RS-485: 2-wire half-duplex or 4-wire full duplex;
ICD108A: RS-232: Half- or full duplex;
MED101A: RS-232: Half- or full duplex;
RS-422: Full duplex;
RS-485: 2-wire half-duplex or 4-wire full duplex;
Fiber ring: Half-duplex over multimode;
All transmissions are async

Speed — ICD105A: 1200 bps to 115.2 kbps;
2400 bps to 38.4 kbps, switch-selectable;
ICD107A: 2400 bps to 115.2 kbps, switch-selectable;
other rates available up to 460.8 kbps;
ICD108A: Up to 115.2 kbps;
MED101A: RS-232: Up to 115.2 kbps;
RS-422/RS-485: Up to 460.8 kbps

CE Approval — Yes

Connectors — ICD105A: (1) 5-position terminal block, (1) DB9 F (DCE);
ICD107A: (2) 5-position terminal blocks;
ICD108A: (1) DB9 M, (1) DB9 F;
MED101A: (2) 5-position terminal blocks, (1) pair of ST®

Operating Environment — Temperature: -40 to +185°F (-40 to +85°C);
Humidity: Up to 95% noncondensing

Power — +10 to -48 VDC (±20%) or from optional DIN Rail 12-VDC Power Supply (PSD100)

Size — ICD105A: 4.9"H x 4.1"W x 1.3"D (12.4 x 10.4 x 3.3 cm);
ICD107A: 3.9"H x 2.9"W x 0.9"D (9.9 x 7.4 x 2.3 cm);
ICD108A: 4.9"H x 4.2"W x 1.3"D (12.4 x 10.7 x 3.3 cm);
MED101A: 4.9"H x 4.5"W x 1.3"D (12.4 x 11.4 x 3.3 cm)

Technically Speaking

DIN rail is an industry-standard metal rail, usually installed inside an electrical enclosure, which serves as a mount for small electrical devices specially designed for use with DIN rails. These devices snap right onto the rails, sometimes requiring a set screw, and are then wired together.

DIN rails are a space-saving way to accommodate components. And because DIN rail devices are so easy to install, replace, maintain, and inspect, this is an exceptionally convenient system that has become very popular in recent years.

A standard DIN rail is 35 mm wide with raised-lip edges, its dimensions outlined by the Deutsche Institut für Normung, a German standardization body. Rails are generally available in aluminum or steel and may be cut for installation. Depending on the requirements of the mounted components, the rail may need to be grounded.

Item	Code
Industrial RS-232↔RS-422/RS-485 DIN Rail Converter	ICD105A
Industrial RS-422/RS-485 DIN Rail Repeater	ICD107A
Industrial RS-232 DIN Rail Repeater	ICD108A
Industrial DIN Rail RS-232/RS-422/RS-485↔Fiber Driver	MED101A
For DB9 male/female connections, order...	
DB9 Male/Female Cable, 6-ft. (1.8-m)	BC00200
For RS-422 and RS-485 interfaces, order...	
Individually Shielded Low-Capacitance Cable—Extra Distance, PVC Jacket, 4 Conductors (2 Pairs), 2000-ft. (609.6-m)	ERN04A-2000
You may also need...	
DIN Rail, 1-m (3.2-ft.)	DR100
DIN Rail DB25 to Terminal Block Adapter	IC980
DIN Rail RS-422/RS-485 Data-Line Surge Protector	SPD001A
To power six converters or repeaters—or four fiber drivers—order...	
DIN Rail 12-VDC Power Supply	PSD100