Westermo

RS-422/485 Repeater
RD-48

⊞ Solution for extending RS-422/485 networks
- Data bus according to RS-422 or RS-485 standard
- Configurable as repeater, isolator or 2- to 4-wire converter
- RS-422/485 termination and fail safe on both sides

⊞ Easy to install and use
- Purpose built DIN rail casing with integral clip
- Automatic direction detection
- DIP switch configuration

⊞ Designed for use in harsh industrial applications
- DC or AC version with low voltage or high voltage options
- Total galvanic isolation
- Industrial EMC, shock and vibration approval tests

⊞ Flexible communication options
- Data format selectable from 9 to 11 bit
- Retiming of signals when used as repeater
- Manchester code support

CE FC Part 15 **EN 61000-6-2** Industrial Immunity **EN 61000-6-4** Industrial Emission

The RD-48 is a multi-purpose device that allows the extension of networks beyond the normal scope of the RS-422/485 standards. The device can be used as a repeater to extend the maximum distance of a network beyond 1200 m or the number of devices above 32. It can also swap between 2 and 4 wires or be used to build a structured and isolated network.

The device is simple to install with its purpose built integral DIN clip and with all configuration by DIP switch.

The RD-48 is designed for use in heavy duty industrial applications, the wide power range, galvanic isolation, transient protection and the design of the termination and fail safe guarantees communication in the worst environments.
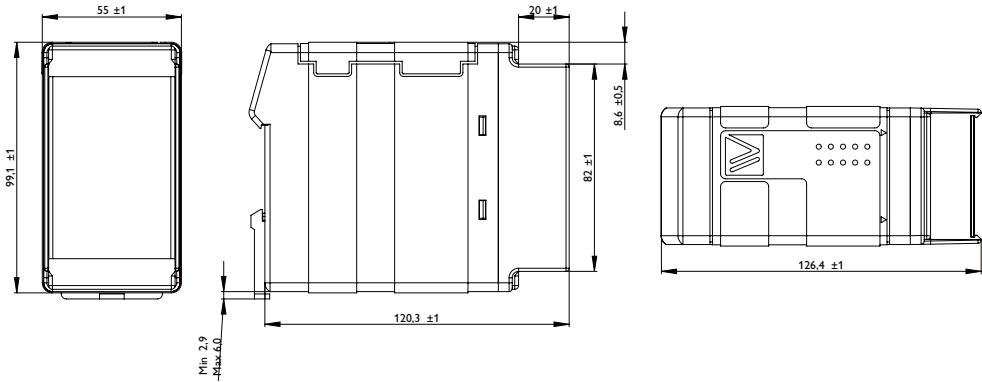
When the RD-48 is used as a repeater it automatically detects the data direction, regenerates and retransmits the data according to the RS-422 or RS-485 standard. The repeater also has support for some Manchester coded synchronous protocols.

Ordering Information

Art.no	Description
3153-3001	RD-48 LV, DIN model, 9.6–57.6 VDC
3153-3101	RD-48 HV, DIN model, 85.5–264 VAC

Specifications RD-48

Dimensional drawing

Dimension W x H x D	55 × 100 × 132 mm (2.16 × 3.93 × 5.19 in)
Weight	0.3 kg
Degree of protection	IP 20

Power	
Operating voltage	**LV:** 9.6 to 57.6 VDC **HV:** 85.5 to 264 VAC or 88 to 300 VDC
Rated current	**LV:** 300 mA **HV:** 30 mA

Interfaces	
RS-422/485	2 × 4-position detachable screw terminal, 300 bit/s to 1.5 Mbit/s

Temperature	
Operating	−40 to 70°C (−40 to 158°F)
Storage & Transport	−40 to 70°C (−40 to 158°F)

Agency approvals and standards compliance	
EMC	EN 61000-6-2, Immunity industrial environments
	EN 61000-6-4, Emission standard for industrial environments
Safety	EN 60950, IT equipment