

M-Bus 10 Converters Data Sheet

M-Bus Converters (C01 - C04)

<p>C01 C02 C03 C04</p> <p>Image.png found or type unknown</p>	<p>Features</p> <ul style="list-style-type: none">• Serial ports RS232 and RS485• Up to 10 simultaneously connected slave devices• ESD protection for the RS232/485 data line• 3000 VDC isolation protection• Power supply: +12 to +30 VDC or 24 VAC• Transmission speed up to 9600 bps• Tx, Rx and power LED indicators• RS485 embedded termination 120 ohm• Operating temperatures: -40°C to +75°C• DIN-rail mounting• Compact size - single module format (1M)• Dimensions: 90x56.4x17.5 mm• 3 years warranty• Customization of OEM is welcomed
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Introduction

C01 - C04 family products are reliable M-Bus electrical standard converters. They enable communication in master mode with up to 10 simultaneously connected slave devices. Dedicated EMC integrated circuits guarantee improved connection quality by limiting the impact of interferences typical for an industrial environment.

Specifications

Redisage PN		C01	C02	C03	C04
Converter ports	Serial	1 x passive RS232	1 x active RS232	1 x RS485	1 x active RS232/RS485

Redisage PN		C01	C02	C03	C04
M-Bus	1 x M-Bus master with up to 10 x slaves				
Power	Voltage	12-30 VDC / 24 VAC			
	Power	< 1 W			
Frame ground connection		yes			
Serial interface	RS232	TxD, RxD, GND			
	RS485	A, B			
	M-Bus	MBus+, MBus -			
3000 VDC isolation side		N/A	RS232	RS485	RS232/RS485
1000 VDC isolation side		RS232	N/A		
Baud rate		up to 9600 bps			
LED indicators		communication Tx, Rx, power			
		RS232 OK	N/A		
RS485 termination		120 ohm manually enabled			
Connector	RS232	3-pin terminal block max. 2.5 mm ² wire			
	RS485	3-pin terminal block max. 2.5 mm ² wire			
	Power	3-pin terminal block max. 2.5 mm ² wire			
	M-Bus	3-pin terminal block max. 2.5 mm ² wire			
Transmission distance	RS485	max. 1,200 m at 9.6 kbps; max. 400 m at 115.2 kbps (Belden 9841 2P twisted-pair cable, if different cables are used, the transmission distance may change)			
	RS232	max. 15 m at 115.2 kbps			

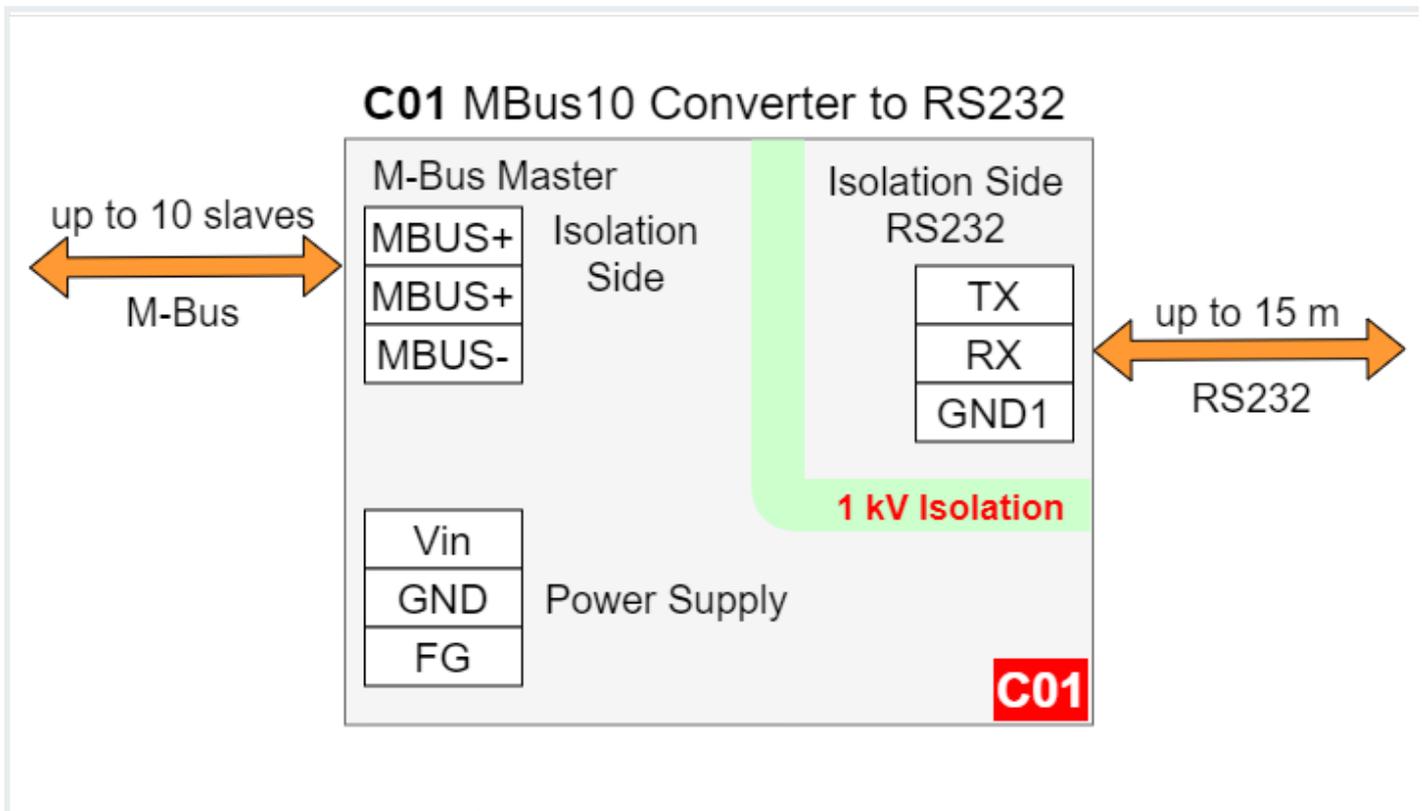
Redisage PN	C01	C02	C03	C04
M-Bus	see: M-Bus max. transmission distance			
Mounting and enclosure	DIN rail, plastic PA - UL 94 V0, black/green			
Temperatures	-40°C to +75°C operating and storage			
Humidity	10 - 90% RH, non-condensing			
ESD protection	±4 kV contact discharge / ±8 kV air discharge			
Certification	CE, RoHS			

M-Bus max. transmission distance

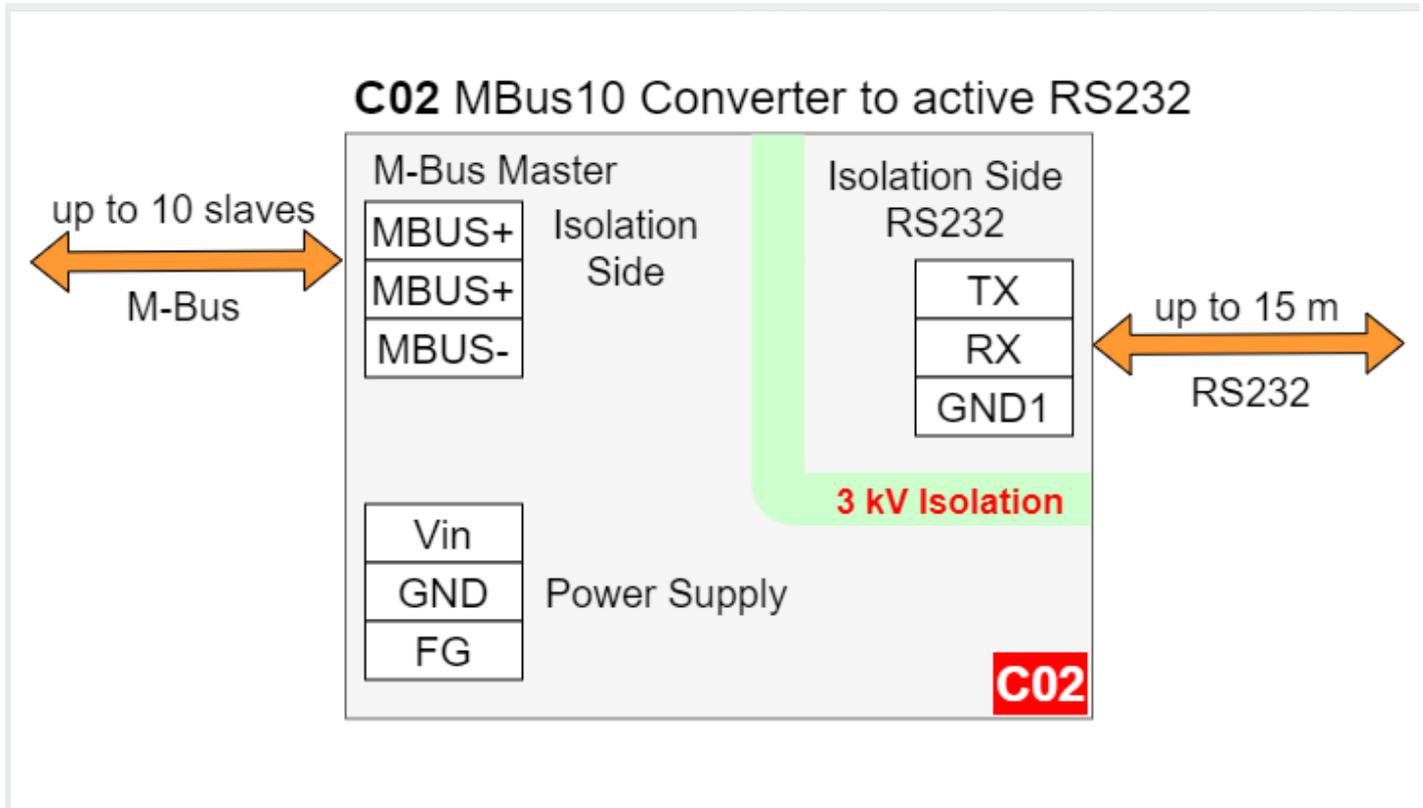
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Variants

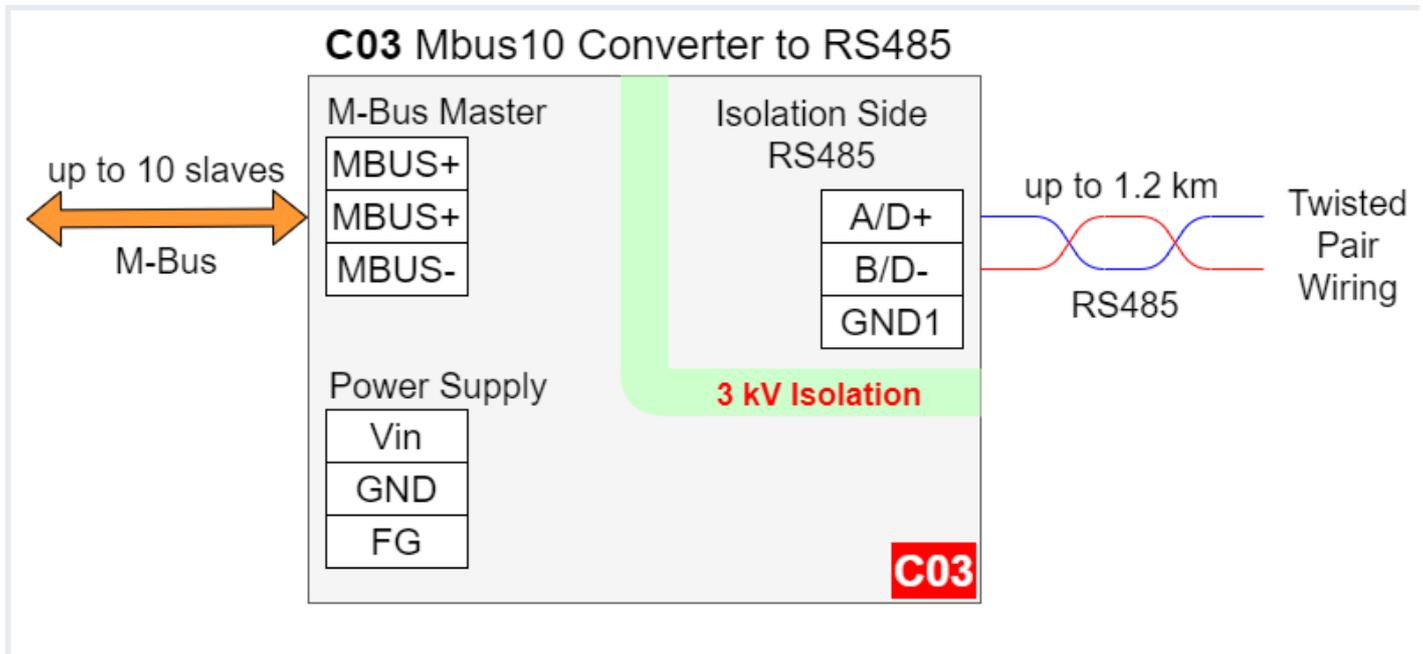
C01 - MBus10 Converter to RS232



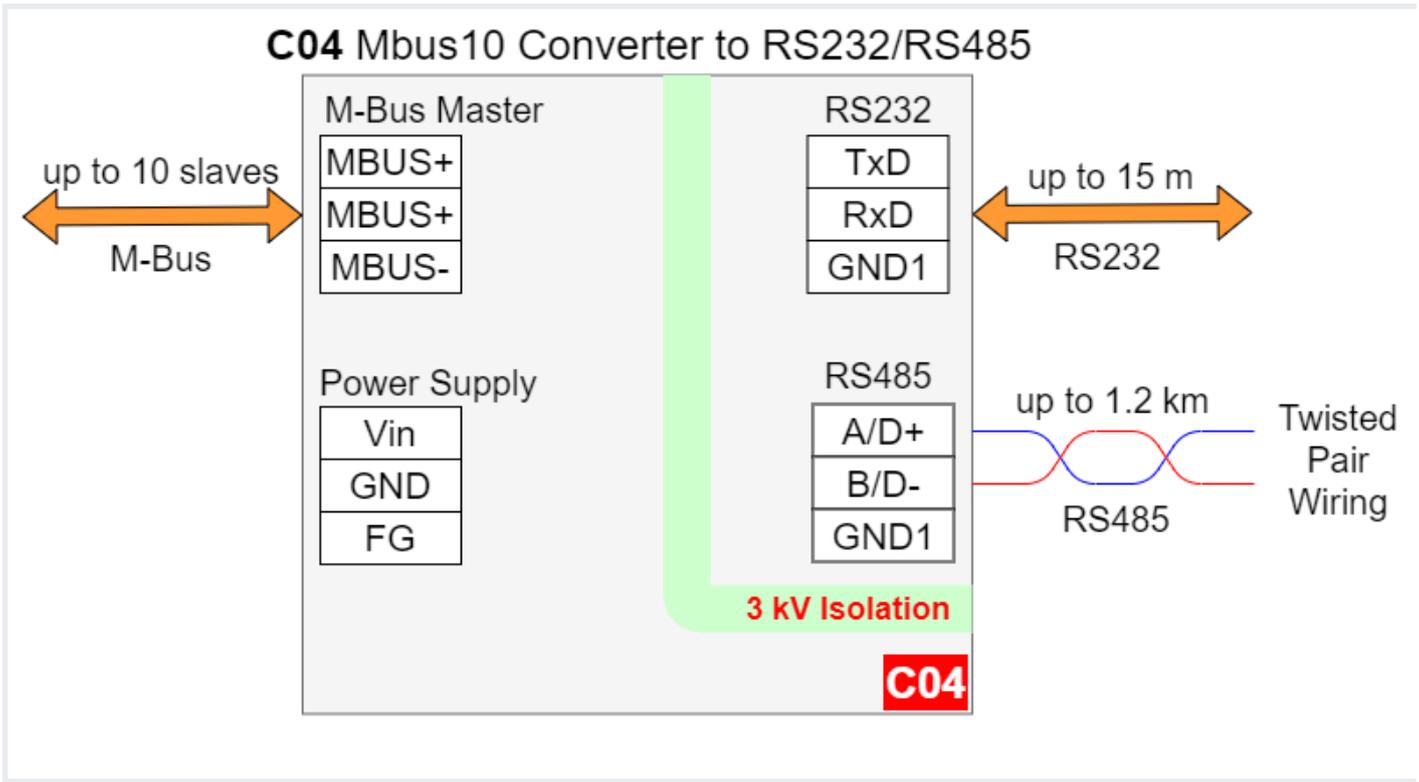
C02 - MBus10 Converter with active RS232 interface



C03 - MBus10 Converter to RS485



C04 - MBus10 Converter to RS232/RS485 with active RS232 interface



Frame ground FG

Electronic circuits are constantly prone to electrostatic discharge ESD. Redisage Electronics modules feature a design for the frame ground terminal block FG. The frame ground provides a path for bypassing ESD, which provides enhanced static protection ESD abilities and ensures the module is more reliable. Connecting FG terminal block to the earth ground will bypass the ESD disturbances outside the device so will provide a better level of protection against ESD.

Frame Ground FG connection reference drawing is provided below.



If earth ground is not available FG can be left floating or it can be connected with the power supply GND.

Pin assignments

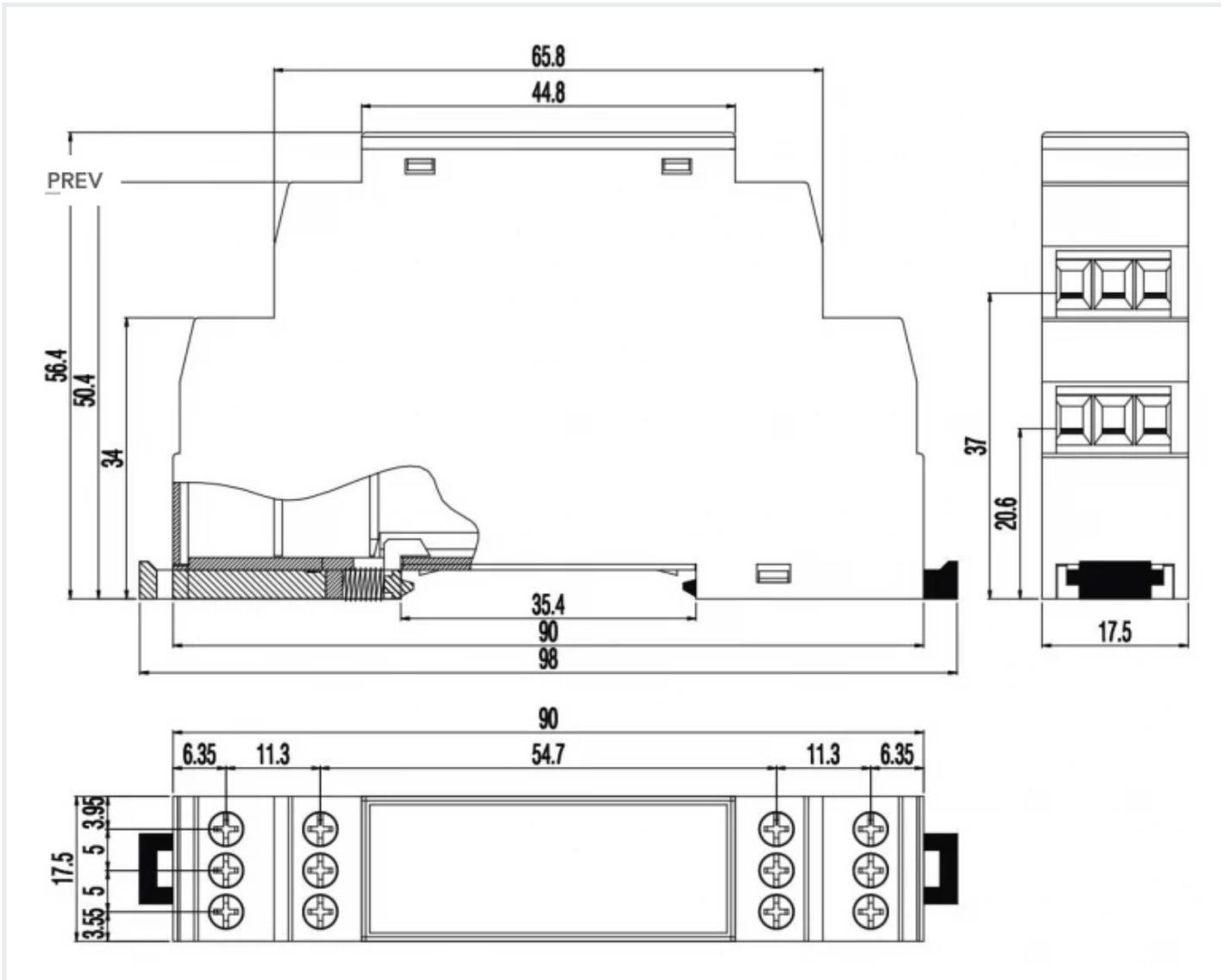
C01 	C02 
C03 	C04 

Enclosure dimensions

1U Module Enclosure

98 x 17.5 x 56.4

Units: mm



Additional notes

Related information and links

[Ordering information](#)

[Accessories](#)

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Products family sample photo



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<https://redisage.com>

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Datasheet-ID:

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Revision #31

Created 28 March 2024 09:16:24

Updated 26 July 2024 14:33:52 by Jan Górski