

MDB-E Ethernet – serial bridge



1. DESCRIPTION

MDB-E is a converter between Ethernet and RS232 / RS485 serial. It converts ModBus RS232 /RS485 – ModBus TCP / IP, connecting the devices to the Ethernet network. Serial ports are galvanically isolated.

Width

1 module, 18 mm

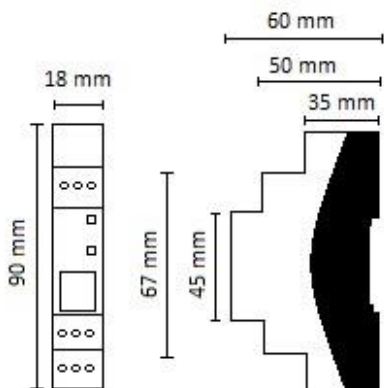
Power supply

9-32VDC

Average consumption

30mA

2. DIMENSIONAL DATA



3. TECHNICAL FEATURES

GENERAL

- Ethernet 10/100 MB/s
- RS485 optoisolated
- RS232 optoisolated (Rx, Tx, GND)
- Serial communication speed up to 115.200 bit/s
- NFC for configuration

MECHANICAL

- IP41 plastic case for DIN rail
- Size: 18 x 90 x 60 mm (1 DIN module)

SOFTWARE

- ModBus TCP/ModBus RTU conversion on RS485/RS232
- RS485/RS232 Modbus RTU conversion
- Bidirectional protocol conversions on all channels
- Easy and fast configuration through APP
- Default parameters:
IP:192.168.1.100 DHCP disabled
9600 bps

ENVIRONMENTAL

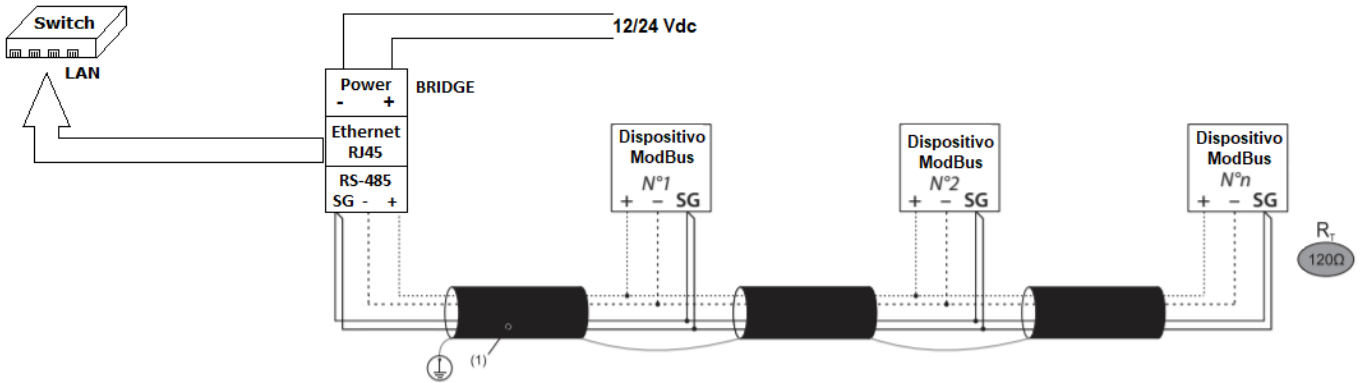
- Operating temperature: -20°C ÷ 60°C
- Relative humidity: from 0 to 80% without condensation
- Storage temperature: -40° ÷ + 80°

MDB-E

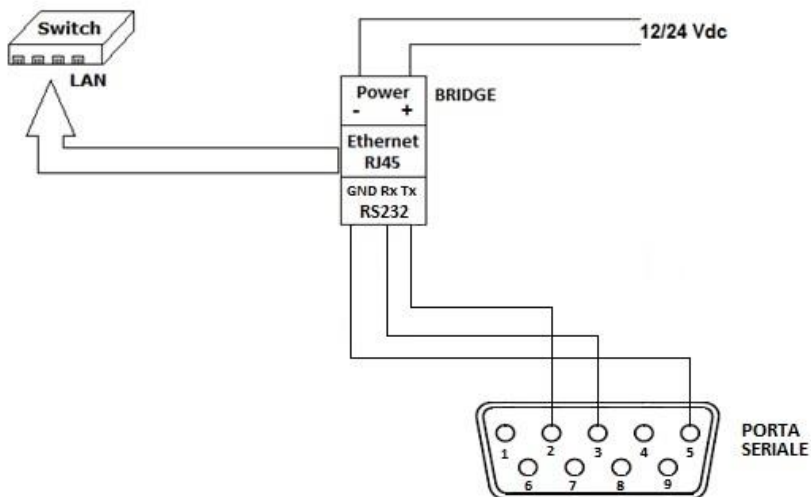
Ethernet – serial bridge

4. CONNECTION

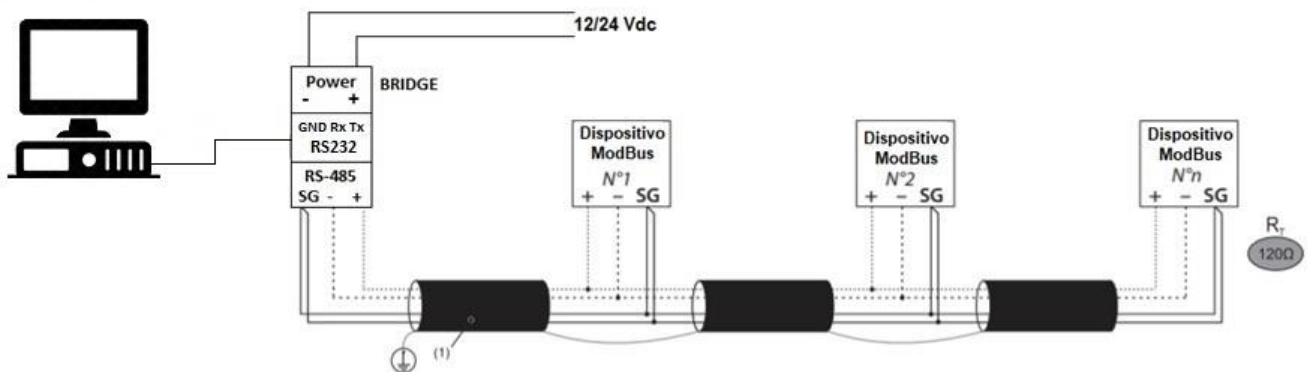
Ethernet – RS485 connection scheme



Ethernet – RS232 connection scheme



RS232 – RS485 connection scheme

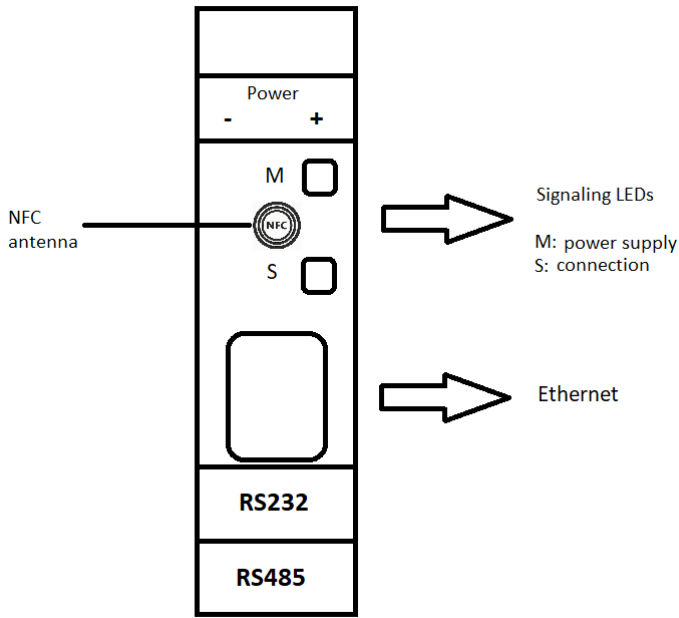


MDB-E

Ethernet – serial bridge

5. GENERAL FEATURES

Front marking



Signaling LEDs

Led	Led status	Meaning
M	BLU (flashing)	Start
S	GREEN	Ethernet connected
S	GREEN (flashing)	Data transmission
S	RED	Ethernet NOT connected

6. COMPLIANCE AND CERTIFICATIONS

Compliance with standards

- Compliance with Directive on electromagnetic compatibility (EMC) n° 2014/30/EU;
- Compliance with low voltage directive n° 2014/35/EU;
- Electromagnetic compatibility:
Emission test according to EN 61000-6-1 / EN 61000-6-2;
Immunity test according to EN 61000-6-3 / EN 61000-6-4;
- Electrical safety: EN50428 (HBES)

Environment respect – Compliance with EU directives

- Compliance with Directive 2011/65/UE as amended by Directive 2015/863 (RoHS 2) on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
- Compliance with REACH regulation (1907/2006): at the date of the publication of this document no element of the SVHC substance list (updated on 27/06/2018) is present in these products.
- WEEE directive (2012/19/EU): the sale of this product is subject to a contribution to eco-organisations in each country responsible for managing end-of-life products in the field of application of the European Waste Electronic and Electrical Equipment Directive.

Plastic materials

- Halogens-free plastic materials.
- Marking of parts according to ISO 11469 and ISO 1043.

Packaging

- Design and manufacture of packaging compliant to decree 98-638 of the 20.07.98 and also to directive 94/62/CE.