



## M-bus to RS-232 converter 10 slaves series MBRS-10x

MBRS-10x series are a microprocessor two-way full-duplex M-bus to RS-232 converters, with ability to supply maximum 10 M-bus slave devices. We provide two different versions:

- standard version MBRS-10TB powered from the grid. Switch power supply 150-250Vac/200-350Vdc. This one is industrial standard, providing full m-bus voltage of 36Vdc on the line
- light version MBRS-10DC powered from 24Vdc power supply. Due to 24Vdc this one is in smaller footprint. It provides 24Vdc voltage on m-bus line, still enough for m-bus devices to work normally

MBRS-10x devices are transparent converters, which means everything that comes from m-bus line is converted and re-translated to RS-232 levels without any interventions or delays. Thus this device can be used with any m-bus dedicated software for reading/writing m-bus meters.

MBRS-10x are protected for short circuit in the output and are mounted on a standard M36 DIN-rail. All connections are made on terminal blocks, except RS-232 connection on MBRS-10TB, which is on standard RJ-45 plug.

M-bus to RS-232 converters small network		
MBRS-10TB	Microcontroller-based m-bus master device for supply and read up to 10 m-bus slave devices. 230Vac power supply, mounted on DIN-rail	
MBRS-10DC	Microcontroller-based m-bus master device for supply and read up to 10 slave devices. Power supply 24Vdc, mounted on DIN-rail	



General technical specifications of MBRS-10TB and MBRS-10DC			
	MBRS-10TB	MBRS-10DC	
m-bus std. loads, max	10	10	
output current, max	35 mA	35 mA	
output current protection, max	40 mA	40 mA	
M-bus max speed	4800 bps	4800 bps	
RS-232 max speed	4800 bps	4800 bps	
power supply	150-250 Vac	12-25 Vdc	
power consumption, max *	< 1.5 W	< 1.5 W	
M-bus voltage	36 Vdc	24 Vdc	
working ambient temperature	-20 °C - +55 °C	-20 °C - +55 °C	
storage ambient temperature	-50 °C - +90 °C	-50 °C - +90 °C	
dimensions (L/W/H)	90/70/57 mm	90/34/57 mm	
display	5 leds	1 led	
IP protection class	IP30	IP30	
weight	145 g	50 g	

<sup>\* -</sup> at max. load

Note that MBRS-10DC has no galvanic isolation between power supply and serial interface RS-232C - i.e. common of serial interface is in fact power supply negative terminal. On the other hand, MBRS-10TB do have due to the nature of its grid power supply, which leads to lower risk for external devices, connected on RS-232 interface.

Gineers offer free software for reading various m-bus devices. With it user can set main parameters of different type of meters, read m-bus devices through RS-232/RS-485 and set all Gineers products.