

■ Article description

The Bacnet Gateway collects data from M-Bus devices and converts the M-Bus data into Bacnet objects.

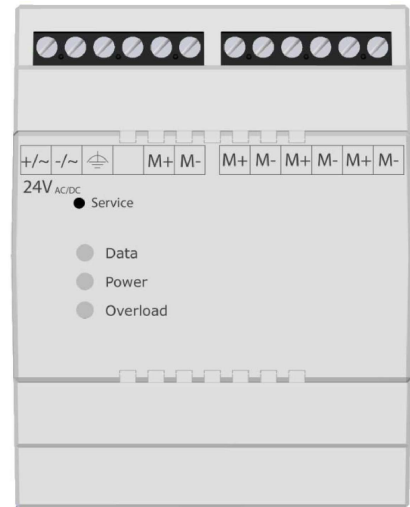
The integrated web server offers easy configuration of the device. The data from M-Bus end devices can be viewed directly with a free web browser.

The Ethernet interface can easily be used as a Bacnet IP interface. Bacnet objects can be integrated with a Bacnet Explorer.

The unit supports the Bacnet service "BACnet Application Specific Controller (B-ASC)" with BACnet standard object types:

- BACnet Device object
- BACnet analogue input object

The device offers areas of application from mechanical engineering and industrial automation to home and building automation with standardised communication.



Picture: MGW32 Bacnet IP Gateway

■ Technical Data

Rated voltage	24 V _{AC / DC}
Supply voltage rate	24 V _{DC} ±20%, 24 V _{AC} ±5%
Power consumption at nominal supply voltage without load currents	≈ 85 mA
Processor	Cortex M4
Button: Service	Set factory settings, press and hold for 30 s until the power LED flashes.
Display	Data: Tx/Rx two-coloured (yellow, green) Power: supply voltage (green) Overload: M-Bus over-current (rot)
M-Bus voltage	≈ 38 V
M-Bus over-current threshold	> 63 mA
M-Bus load	M-Bus voltage 48 mA (32 standard loads @ 1,5 mA)
Interfaces	Bacnet IP/ Ethernet, M-Bus
Data rate M-Bus	300 ... 38400 Baud
Protection of interfaces	Galvanic isolation between supply voltage, Ethernet (Bacnet TCPIP) and M-Bus Additional TVS diodes.

■ Terminals

Connection type	Screw terminal with tension sleeve
Solid conductor cross-section	0,2 mm ² ... 4 mm ²
Stranded conductor cross-section	0,2 mm ² ... 2,5 mm ²
Stranded conductor cross-section with sleeve	0,25 mm ² ... 2,5 mm ²
Stripping length	8 mm

■ Environmental conditions

Ambient temperature (operating)	-10 °C to +50 °C
Relative humidity (without condensation)	90 %

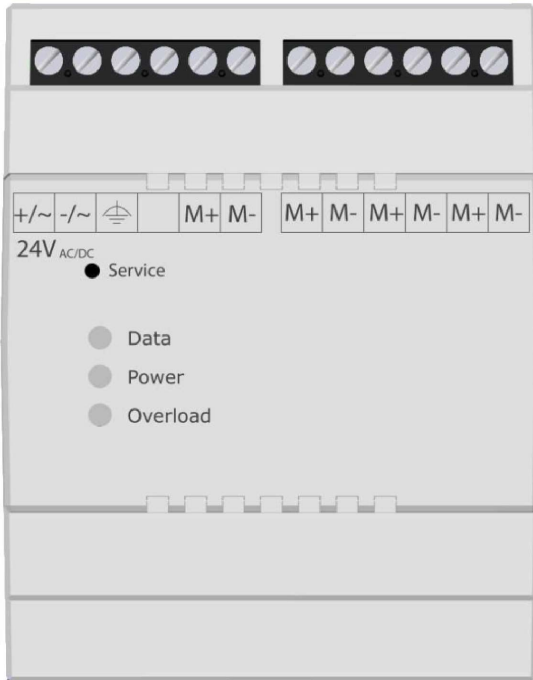
■ Housing data

Type of housing	Installation housing according to DIN 43880
Housing material	Plastic, polycarbonate PC V-0
Colour	Light grey (RAL 7035)
Flammability category	V0 according to UL 94
Ingress protection	IP 20
Mounting	Mounting rail TS35, (4TE) or with screw lugs according to DIN EN 50022.
Mounting position	Parallel to mounting rail


■ Standards and regulations

Conformity marking	CE
EMC noise immunity	acc. DIN EN 55024
EMC radiated emissions	acc. DIN EN 55032
Elektromagnetic compatibility	acc. DIN EN IEC 61000-6-2
M-Bus communication	acc. DIN EN 13757-2

■ Terminal assignment



↑
Bacnet IP
Ethernet

Pin assignment	
Function	Pin
Supply voltage	24V +/-
Supply voltage	24V -/~
Functional grounding	
none	Not in use
M-Bus	M+
M-Bus	M-
M-Bus	M-
M-Bus	M-
M-Bus	M+
M-Bus	M-
M-Bus	M+
M-Bus	M-
Ethernet / Bacnet IP interface	Ethernet / Bacnet IP

Power	Output	Input	Bacnet IP/ Ethernet
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■ Physical Data

Width	72 mm
Height	90 mm
Depth (device)	64 mm
Weight	≈ 170 g

