M-Bus to BACnet/IP - the inexpensive solution for small installations

ASHRAE **BACnet**®
INTEREST GROUP EUROPE

The gateway that can read out all meters

An extensive and complex software is required for standard-compliant data interpretation with the M-Bus. There is a powerful software stack on all the devices of the MBUS-GEB product family which allows to readout all available meters on the market without any additional configuration effort. All data can therefore be provided to auxiliary systems at no expense.

Variable primary communication

The MBUS-GE5B supports the operation of 5 unit loads directly, i.e. 5 meters can be connected.

BACnet/IP for connecting building control systems

The MBUS-GE5B is offering an Ethernet interface which supports BACnet/IP. The central building controller can use this interface for directly accessing the data of the meters and sensors, that have been readout via the M-Bus.

That makes it necessary to translate from the M-Bus protocol to the BACnet objects. The MBUS-GE5B includes software for realizing the translation. The gateways take the data from the M-Bus and put it into the BACnet/IP objects. In this case, the object Analog Value is used for representing the meter values. This offers the possibility to not only transmit the value itself but also its meta data like the unit, status or a description. This additional data is present on the M-Bus. Such an integration allows a continuous data communication without losing data during translation. The MBUS-GE5B comes with a BACnet software stack which is certified according to PICS (BACnet/IP Annex J). This ensures the compatibility with other BACnet devices

Easy configuration of the gateways

The MBUS-GE5B readouts meters autonomously and convert their data. This requires a minimum initial configuration which happens in an easy and intuitive way. There is a built-in webserver on the devices offering an integrated, platform-independent web interface.

The operator can put any M-Bus meter into operation without the need for extensive prior knowledge or special software tools. The web frontend also eases the remote access.

As a rule, the provided standard settings are convenient and the operator only has to start a bus scan for initial operation. All connected M-Bus meters will be found, and their data will be readout. The software will then generate all BACnet objects according to the data of the meters automatically and makes these data directly available for any building automation system. It is possible to integrate meters or sensors into any control system within a very short time and without losing information. BACnet features such as searching for devices and automatically listing the data points are also supported by our gateways. In this way, the integration is additionally simplified.

Transparent mode

The transparent mode enables the direct access to the M-Bus meters to parameterize them. For example, it is possible to set the primary address or the baud rate remotely from the PC.

General technical data

Power supply	24 VDC, < 300 mA, max. 2.5 mm²
Ethernet connection	100 MBit, RJ45, shielded
Dimensions	35 x 90 x 59 (W x H x D in mm)
Mounting	35 mm DIN rail, IP 20
IP addresses	Static or DHCP
TCP ports	Freely configurable
BACnet	BACnet/IP Annex J, PICS certified
BACnet objects (Data points)	AV for values of the slave Max. 50 BACnet objects
Web server	Integrated
Max. baud rate M-Bus	19200 bps
Connection of M-Bus	Screw terminals, max. 2.5 mm²
Number of slaves	Max. 5 unit loads
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