MBusGateway

Programmable M-Bus IoT converter





MBus Gateway is designed for easy integration of M-Bus and **Modbus RTU/TCP.** With this device, M-Bus slave devices can be seamlessly added into an existing Modbus network, and M-Bus slaves can be made accessible to serial masters.

It also has a **remote web access panel** that allows you to manage groups of devices. That makes integration customizable and easy.



Features of adaptation to industrial conditions:

Low energy consumption

RTC Battery-powered Real Time Clock (RTC)

WatchDog function ensures hardware operation control of selected services

Effective file systems used for FLASH memory, ensuring long, failure-free operation

Compact, durable housing made from ABS plastic, adapted to installation on a DIN bus

Easy installation due to the use of disconnectable screw terminals

No moving elements (fans, platter disks)

Operating temperature range: -25 ~ 80°C

MBus Gateway can be used as:

Protocol and Interface Converter

Data logger

Embedded Web Server

Embedded Computer

Telemetry/IoT Module

PLC

Industrial Modem and GPRS, 3G, 4G/LTE Router

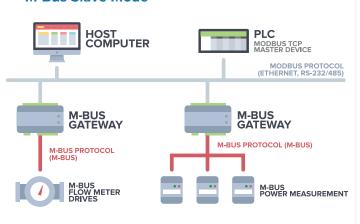
I/O Expansion Module

GPRS, 3G, 4G/LTE Notify Module

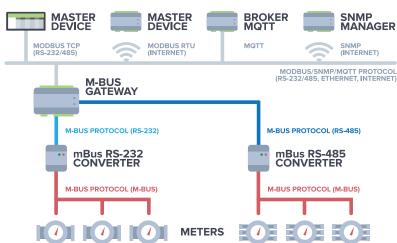
Access via Website (Visualize)

GPS module

M-Bus Slave Mode



Sample Application



M-Bus Gateway - M-Bus to Modbus RTU/TCP IoT converter

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ETHERNET INTERFACE		
Protocols	Modbus TCP	>
Numer of ports	up to 2 ports	(O)
Bandwidht	100 Mbit/s	υ
Connectors	RS45	MBus Gateway
SERIAL INTERFACE		Ű
Protocols	Modbus RTU/ASCII Master/Slave	<u> </u>
Number of ports	1/2/4/8	8
Serial communication standard	RS-232/485	<u> </u>
Connectors	Screw terminal	
Isolation protection	Overvoltage protection transil bidirectional 24V DC, Peak 600W	
SERIAL INTERFACE SIGNALS		
RS-232	TxD, RxD, GND	
RS-485	Data+, Data-	
M-BUS INTERFACE		
M-Bus slave devices	up to 400	
Interface	M-; M-; M+; M+; +24V	
Connector	Screw Terminal Block	
Baudrate	300 to 19200 baud/sec	
Surge / Overvoltage protection	24V peak 600W/1ms (up to 3 devices)	
	43V peak 600W/1ms (4 and more devices)	
Optoisolation up to 3 devices	2.5kV	
Optoisolation up to 4-10 devices	M-BUS - RS-232: 100V AC/DC	
Optoisolation up to 11-400 devices	M-BUS - RS-232: 100V AC/DC	
	Power Supply - RS 232: 100V AC/DC	
Additional M-Bus power input	Up to 10 devices: not required	
	11-400 devices: 20-35 Vdc	
SOFTWARE		
Configuration	Web-panel, SSH console, Telnet console, serila console	
Software type	Linux (Kernel 4.0+), iMod, iModCloud	
Network protocols	TCP, UDP, HTTP, SMTP, NTP, DNS, DHCP Client, SNMPv1 (agent), SNMPv2 (agent), ARP, Telne	et
Multi-master and Multi-drop	Master mode: 128 TCP slaves/servers	
	Slave mode: 256 TCP masters/clients	
POWER SUPPLY		
Supply voltage	9 ~ 30 V DC, recommended: 12V DC 1A	
Power consumption w/o&w modem	3 W - 10 W (typically 3 W) / 5 W - 14 W (typically 5 W)	
MECHANICAL CHARACTERISTICS		
Data storage	Internal memory 4GB EMMC, External storage USB	
Casing and mounting	ABS, DIN rail mounting	
Dimensions	MBUS Gateway 10 : 142.3 x 91 x 62mm / MBUS Gateway 60, 200, 400 : 213 x 91 x 62mm	
Work/storage conditions	-25 $^{\circ}$ 80°C, humidity: 5 $^{\circ}$ 95% RH (non-condensing)	
MANUFACTURER		
	TECHBASE Group Sp. z o.o., ul. Pana Tadeusza 14, 80-123 Gdańsk, Poland	

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