



Z-KEY-MBUS

INDUSTRIAL GATEWAY / PROTOCOL CONVERTER M-BUS ↔ MODBUS RTU/TCP-IP



Highlights

- **Device register autonomous reading on M-Bus protocol**
- **ModBUS RTU and TCP-IP protocols support**
- **Nr. 1 Fast Ethernet port**
- **Nr. 2 serial ports**
- **Nr. 1 Micro USB port**
- **Max 25 devices can be connected**
- **Management of up to 500 M-Bus variables (tags)**
- **Configuration via Web Server**
- **Connected meters automatic detection**

Z-KEY-MBUS allows the conversion from M-Bus protocol (Meter Bus) to ModBUS RTU / ModBUS TCP-IP. It is a converter that can read, convert and transfer data up to 25 M-Bus instruments. It is available with Ethernet, RS485 and RS485 / RS232 interfaces, and equipped with a built-in M-Bus port. The converter scans the network in search of Meter-Bus devices at the set speed, automatically downloads the configuration from the identified devices, automatically builds the ModBUS mapping, pointing the address and type of data.

Configuration takes place directly via Web Server without the need for external software. It is also equipped with a database of the main M-Bus devices constantly updated for offline configurations.

The applications of the Z-KEY-MBUS are those in which analyzers, meters, sensors and devices must be interfaced or integrated in MBus network, the main bus used for energy metering and the management of intelligent meters for the separate recording of consumption of heat, water, electricity and gas.





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TECHNICAL DATA

GENERAL DATA

Power supply	11..40 Vdc; 19..28 Vac, 50–60 Hz
Power consumption	3,5 W (typical), 6,5 W (max)
Isolation	1.500 Vac@3 ways (M-BUS/RS232-RS485/Power Supply)

Led Status Indicators

Power supply
SD card access
Ethernet link and data traffic
Data transmission/reception on serial ports
M-BUS power supply / communication
Data transmission/reception on M-BUS port

Protection degree	IP20
Operating temperature	-20 °C..+50 °C
Dimension (l x h x w)	100 x 112 x 35 mm
Weight	210 g
Case	PA6 glass filled, black color
Mounting	For 35 mm rail IEC EN 60715

ETHERNET COMMUNICATION

Nr. Ports	1
Type	Fast Ethernet 10/100 baseTx, RJ45 front connector with autoswitch
Configuration	By built-in Web Server
Protocol	Modbus TCP-IP server (max 8 simultaneous clients)
ETH device search	By Seneca Discovery Device software

SERIAL COMMUNICATION

Nr. Ports	2
Type	Port COM#1 RS485 for IDC10 connector Port COM#2 RS485/RS232 switchable to clamp
Baud rate	From 1.200 to 115.200 bps
Protocol	Modbus RTU Slave

USB COMMUNICATION

Nr. Ports	1
Type	Micro USB on side connector
Driver	Windows/Linux Virtual Com CDC standard
Protocol	Modbus RTU Slave
Configuration	Unmodifiable: 115200 bps, 8 bits, No parity, 1 stop bit, station address 1

M-BUS COMMUNICATION

Nr. Ports	1
Nr. Max M-BUS slave node	25
Baud Rate	From 300 to 38.400 bps

CONNECTIVITY

Nr Max TCP-IP Clients (Server Mode)	8
Nr Max Variable Clients / Tags	500
N° Max ModBUS Registers	1000
Modbus Gateway Modbus TCP/RTU to M-BUS	Yes

MEMORY

Micro SD card	Max 32 GB
Nr max M-BUS variables / tags	500

SECURITY

Web server authentication	Yes
Password	Yes

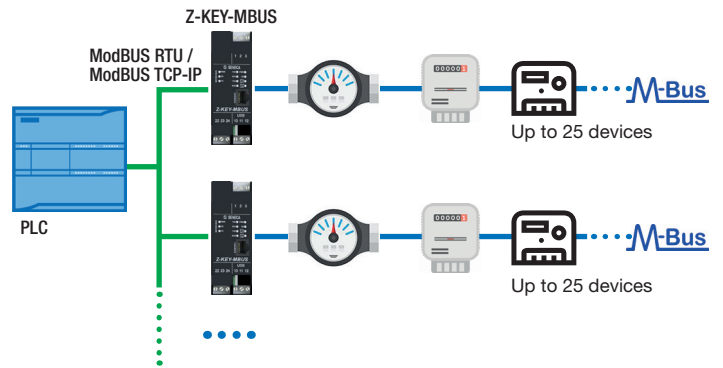
SETTINGS & SOFTWARE

DIP switches	Yes
Web server	Yes
Configuration via Web Server	Stauts readings (max 50 tag per page), settings, M-BUS devices, M-BUS network scan, tag setup, firmware and database update
SDD (Seneca Discovery Device)	Yes

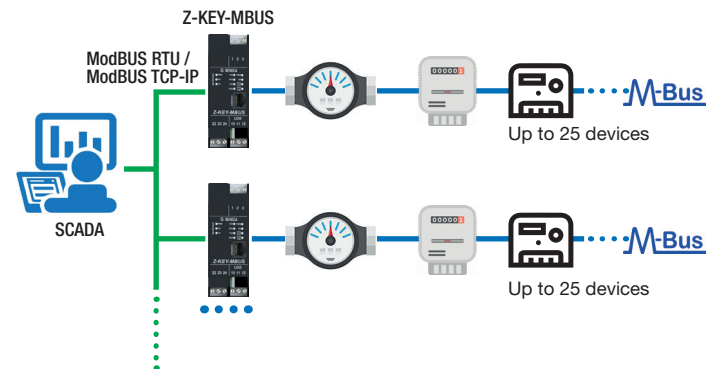
STANDARD

Approvals	CE
Norms	EN 61000-6-4, EN 61000-6-2, EN 60950

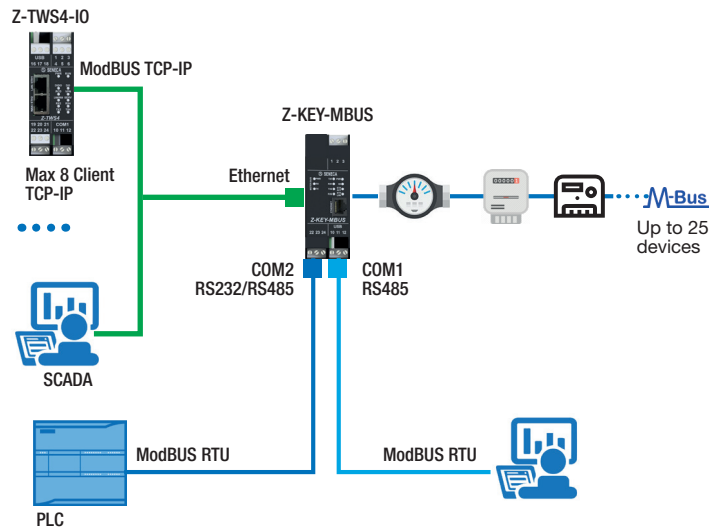
PLC CONNECTION



SCADA CONNECTION



MUTIUSER DISTRIBUTED CONNECTION



ORDER CODES

Code	Description
Z-KEY-MBUS	Industrial Gateway / Protocol Converter M-BUS ↔ ModBUS RTU / TCP-IP
SOFTWARE TOOL	
SDD	SENECA Discovery Device, IP scanner
ACCESSORIES	
CS-DB9M-MEF-PH	Straight-thru Ethernet cable (RJ45-RJ45)
CE-RJ45-RJ45-R	Cavo ethernet diritto (RJ45 / RJ45)
MSD	Micro SD memory card with adapter
Z-PC-DIN1-35	DIN rail bus system 1 slot 35 mm
Z-PC-DIN4-35	DIN rail bus system 4 slot 35 mm
Z-PC-DINAL1-35	DIN rail bus system head terminal + 1 slot 35 mm