

R-KEY-MBUS
Z-KEY-MBUS

INDUSTRIAL GATEWAYS - MODBUS RTU / TCP-IP PROTOCOL CONVERTERS

Highlights

- **Autonomous reading of device registers on M-Bus protocol**
- **ModBUS RTU and TCP-IP protocols support**
- **Nr.1 Fast Ethernet port**
- **Nr.1/2 serial ports**
- **Nr.1 Micro USB port (Z-KEY-MBUS)**
- **Max 25 connectable devices**
- **Management of up to 500 M-Bus variables (tags)**
- **Configuration via Web Server**
- **Automatic M-Bus network scan**

Z-KEY-MBUS and R-KEY-MBUS allow the conversion from the M-Bus (Meter Bus) protocol to ModBUS RTU / ModBUS TCPIP.

These converters can read, convert and transfer data fromup to 25 M-Bus devices. They are available with Ethernet, RS485 and RS485/ RS232 interfaces, and have an integrated M-Bus port.

The converters scan the network for Meter-Bus devices at the set speed, automatically download the configuration from the detected devices detected, automatically builds the ModBUS mapping, indicating address and type of data.The configuration is done directly through Web Server without need of an external software.

Moreover they have a database of the main M-Bus devices constantly updated for offline configurations. offline. The applications are those in which must be interfaced analyzers

meters, sensors and M-Bus devices, the main bus used for energy accounting and the main bus used for energy metering and the management of the intelligent meters for the separate recording of consumption of heat, water, electricity and gas.

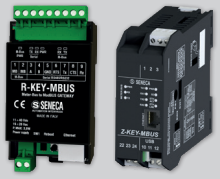
100% Made & Designed in Italy

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M-BUS GATEWAYS

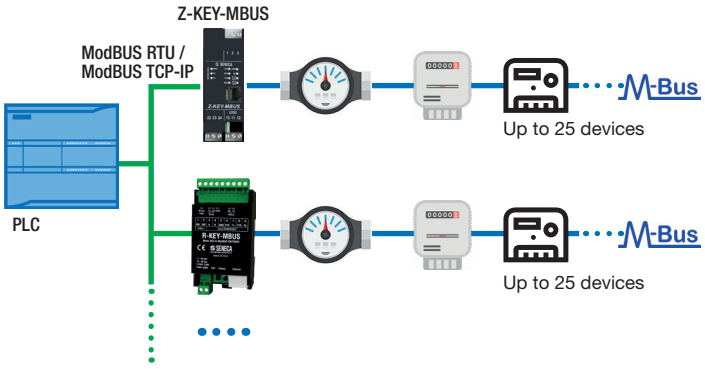


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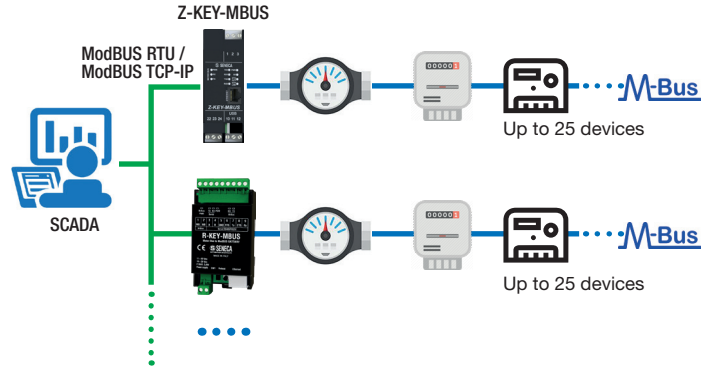
TECHNICAL DATA

GENERAL DATA	
Power supply	11..40 Vdc; 19..28 Vac, 50–60 Hz
Power consumption	3,5 W (typical Z-KEY-MBUS), 3,8 W (typical R-KEY-MBUS)
Isolation	1.500 Vac @3-ways (M-BUS/RS232-RS485/Power Supply)
LED Status indicators	Power supply SD card access Ethernet links and data traffic Data transmission / reception on serial ports Power supply / M-BUS communication Data transmission / reception on M-BUS port
Protection degree	IP20
Operating temperature	-20°C..+50°C (Z-KEY-MBUS); -25°C..+65°C (R-KEY-MBUS)
Dimension (lxhxd)	100 x 35 x 112 mm
Weight	210 g (Z-KEY-MBUS); 80 g (R-KEY-MBUS)
Case	Black glass-filled PA6 plastic (Z-KEY-MBUS); self-extinguishing UL94-V0 ABS (R-KEY-MBUS)
Mounting	For 35 mm IEC EN 60715 rail or wall (R-KEY-MBUS)
ETHERNET COMMUNICATION	
Nr. Ports	1
Type	Fast Ethernet 10/100 baseTx, autoswitch front RJ45
Configuration	By embedded Webserver
Protocol	Modbus TCP-IP server (max 8 client simultanei)
ETH device search	By Seneca Discovery Device software
SERIAL COMMUNICATION	
Nr. Ports	1 (R-KEY-BUS); 2 (Z-KEY-MBUS)
Type	COM#1 RS485 port, IDC10 connector COM#2 RS485/RS232 port terminal-switchable
Baud rate	From 1.200 to 115.200 bps
Protocol	Modbus RTU Slave
USB COMMUNICATION	
Nr. Ports	1 (Z-KEY-MBUS)
Type	Micro USB on side connector
Driver	Windows/Linux Virtual Com CDC standard
Protocol	Modbus RTU Slave
Settings	Not modifiable : 115200 bit/s, 8 bit, No parity, 1 stop bit, station address 1
M-BUS COMMUNICATION	
Nr. Ports	1
Nr. max slave M-BUS nodes	25
Baud Rate	From 300 to 38.400 bps
CONNECTIVITY	
N° Max Client TCP-IP (Server Mode)	8
N° Max Client variabili / Tag	500
N° Max Registri ModBUS	1000
Modbus Gateway Modbus TCP/RTU to M-BUS	Yes
MEMORY	
Micro SD card	Max 32 GB
Max number of variables / M-BUS tags	500
Security	
Web Server authentication	Yes
Password	Yes
SETTINGS & SOFTWARE	
DIP switch	Yes
Web server	Yes
Web Server configuration	Status reading (max 50 tags per page), settings, M-BUS devices, M-BUS network scan, Setup Tag, firmware and database update
SDD (Seneca Discovery Device)	Yes
STANDARDS	
Approvals	CE
Norms	EN 61000-6-4, EN 61000-6-2, EN 60950

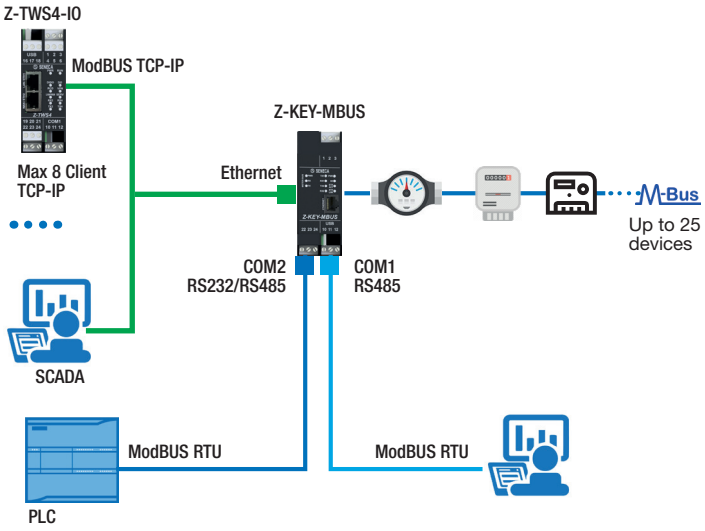
PLC CONNECTION



SCADA CONNECTION



MULTI-USER DISTRIBUTED CONNECTION



ORDER CODES

Code	Description
Z-KEY-MBUS	2-port ModBUS RTU / TCP-IP ↔ M-BUS industrial gateway / protocol converter
R-KEYMBUS	1-port ModBUS RTU / TCP-IP ↔ M-BUS industrial gateway / protocol converter
TOOL SOFTWARE	
SDD	SENECA Discovery Device, IP scanner
ACCESSORIES	
CS-DB9M-MEF-PH	Serial communication cable (DB9M connector / 4 ways female connector) 3 wires mt 1,5
CE-RJ45-RJ45-R	Straight ethernet cable (RJ45 / RJ45)
MSD	Micro SD memory card with adapter
Z-PC-DIN1-35	Support for quick mounting on DIN rail 1 slot step 35 mm
Z-PC-DIN4-35	Support for quick mounting on DIN rail 4 slots step 35 mm
Z-PC-DINAL1-35	Support for quick mounting on DIN rail head + 1 slot step 35 mm

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