



# AR-KEY-MBUS

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

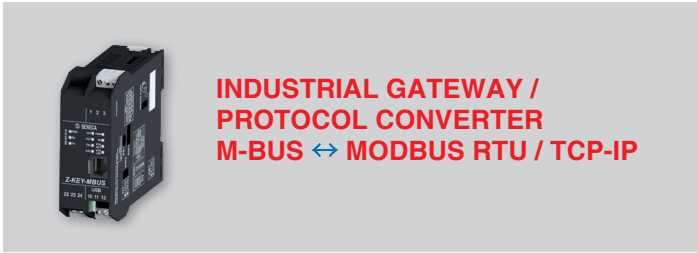
### Highlights

- **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**

AR-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 AR-KEY-MBUS are those in which analyzers, meters, sensors and devices must be interfaced or integrated in M-Bus 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.



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

**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 (lxhwx)	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

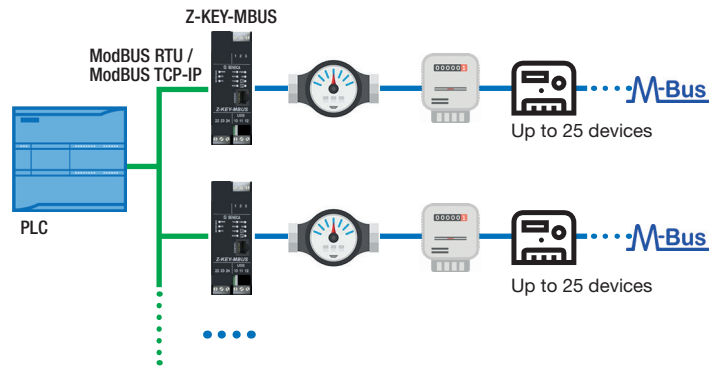
**SETTINGS & SOFTWARE**

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

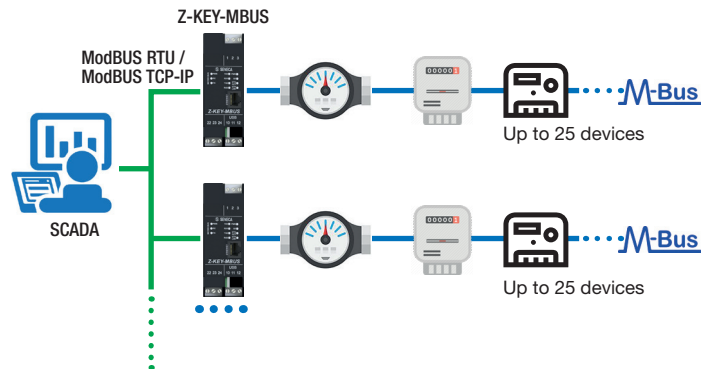
**STANDARD**

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

**PLC CONNECTION**



**SCADA CONNECTION**



**MULTIUSER DISTRIBUTED CONNECTION**

