

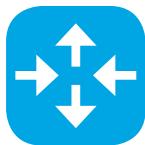


Z-KEY



2-PORT MODBUS RTU INDUSTRIAL GATEWAY / SERIAL DEVICE SERVER

Z-KEY



ModBUS Gateway
(ModBUS TCP-IP ↔ ModBUS RTU)



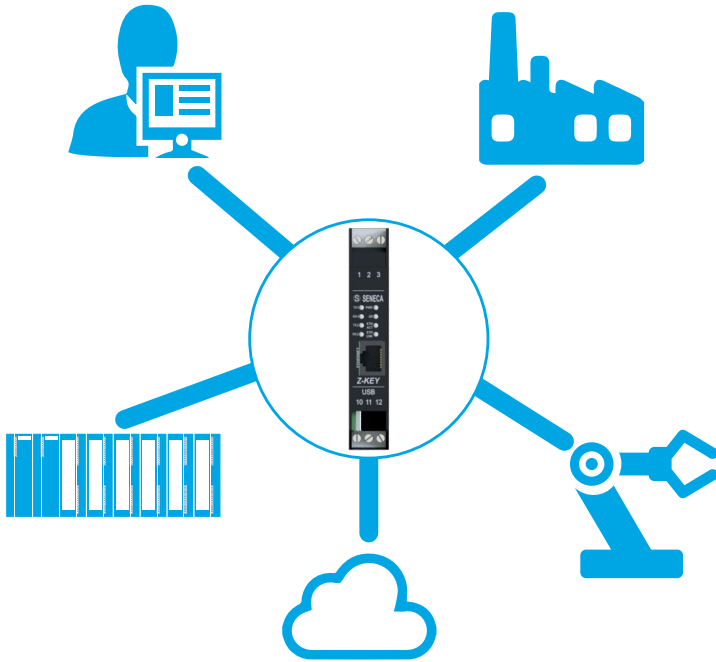
ModBUS Gateway shared memory



Serial Device Server
(Remote Virtual COM)



2-PORT MODBUS RTU INDUSTRIAL GATEWAY / SERIAL DEVICE SERVER



Z-KEY is a device that can extend networks and allow the transfer of process data between different levels of IT and industrial communication architecture. Z-KEY guarantees signals transmission between ModBUS TCP-IP / ModBUS RTU in different modes, increasing the number of connected nodes and network distances.

The device can also extend the serial network operating as a transparent Remote virtual COM to the serial communication protocol.

Equipped with nr.1 10/100 Tx Fast Ethernet port and nr. 2 serial ports (RS232 / RS485, RS485), Z-KEY offers multiple methods of configuration through DIP-switches, web server and software tools such as SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection), EASY Z-KEY.

Z-KEY advanced functions include supporting lot Server «Cloud BOX», advanced serial diagnostics, «Quarantine» mode with time settable for “in fail” devices.

HIGHLIGHTS

MULTIFUNCTION GATEWAY



EMBEDDED / CUSTOM WEB SERVER



MAXIMUM CONFIGURATION FLEXIBILITY



EXCEL TEMPLATE FOR TAGS DECLARATION AND EXPORT



SUPPORT UP TO 8 SIMULTANEOUS MODBUS TCP-IP CLIENTS



SUPPORT UP TO 128 MODBUS RTU SLAVE NODES AND 10 MODBUS TCP-IP SERVERS



MAPPING UP TO 500 TAGS



CLOUD BOX SUPPORT



QUARANTINE MODE WITH SETTABLE TIME



SERIAL COMMUNICATION PROTOCOL TRANSPARENCY



AUTOMATED IP ADDRESS SCAN



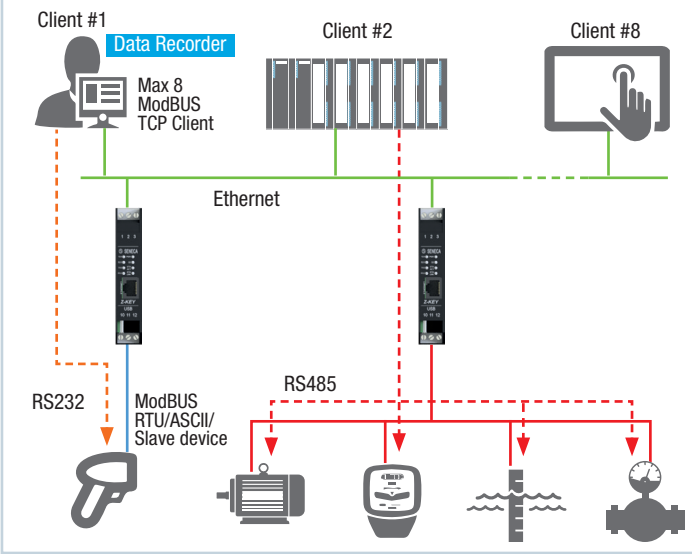
FIRMWARE UPDATE BY MICRO SD AND WEB SERVER



APPLICATION EXAMPLES

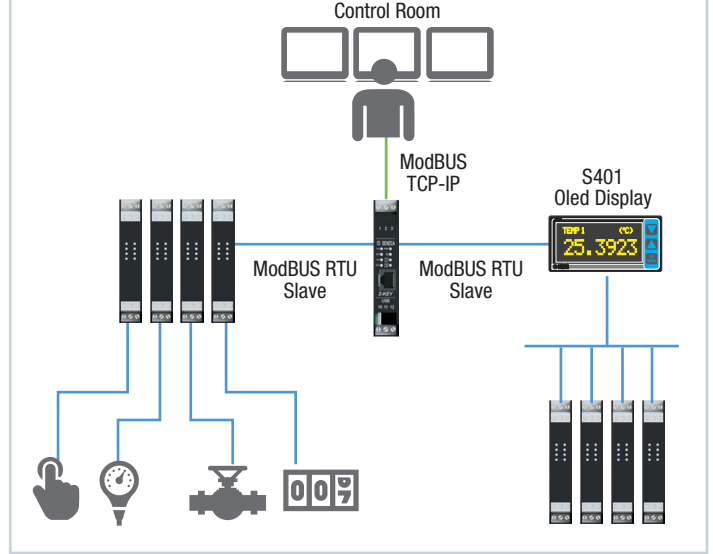
MODBUS GATEWAY

MODBUS TCP-IP → MODBUS RTU)



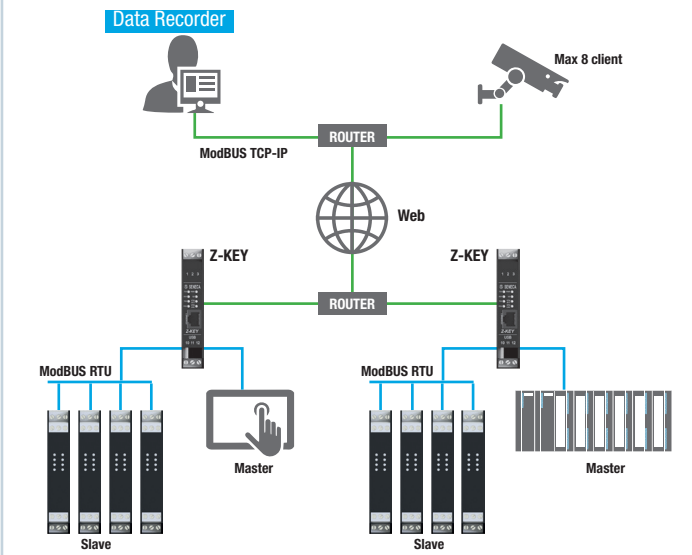
MODBUS GATEWAY

MODBUS TCP-IP → MODBUS RTU)



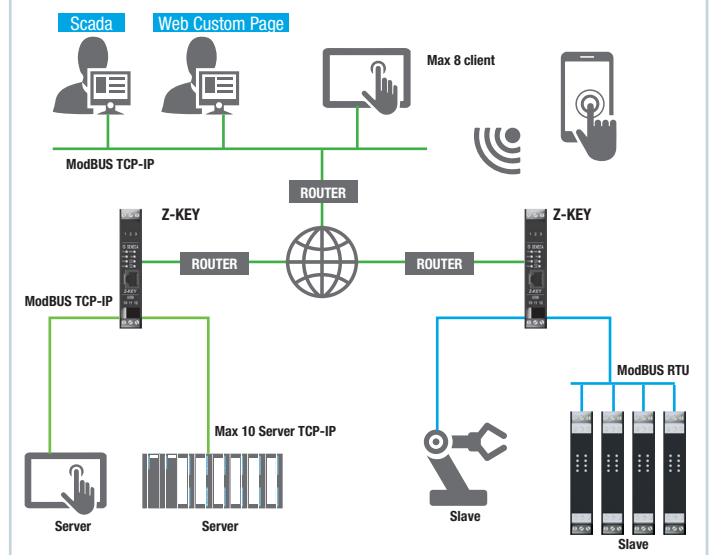
MODBUS GATEWAY SHARED MEMORY

(MODBUS TCP-IP → MODBUS RTU MASTER/SLAVE)



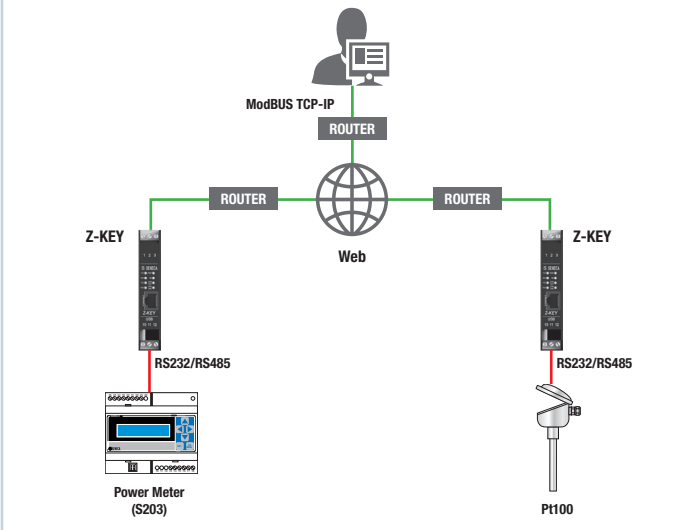
MODBUS GATEWAY SHARED MEMORY

(MODBUS TCP-IP CLIENT → ModBUS RTU Slave / ModBUS TCP-IP Server)

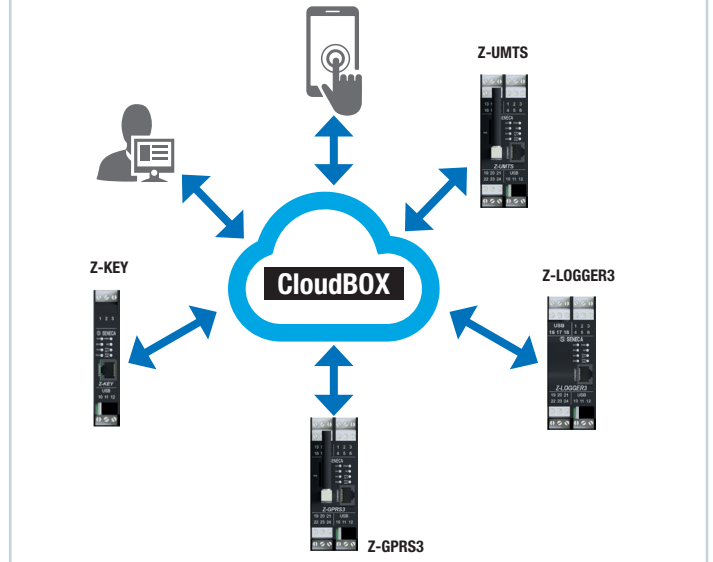


SERIAL DEVICE SERVER / VIRTUAL COM

SESC - ETH ↔ Serial



IoT CONNECTIVITY





2-PORT MODBUS RTU INDUSTRIAL GATEWAY SERIAL DEVICE SERVER

TECHNICAL DATA

GENERAL DATA

Power supply	10..40 Vdc; 19..28 Vac
Power consumption	2 W @ 24 Vac (typical)
Isolation	1,5 kVac
LED status indicators	Power supply Rx-Tx serial communication Ethernet link and traffic
Protection degree	IP20
Micro SD	Max 32 GB
Operating temperature	-20 °C..+50 °C
Dimension (wxhxd)	17,5 x 100 x 112 mm
Weight	170 g
Case	Nylon 6, 30% fiberglass filled, self extinguishing class V0
Mounting	For DIN rail (IEC EN 60715)

COMMUNICATION

Ethernet ports (ETH1, ETH2)	Nr.1 Fast Ethernet port 10/100 Tx, RJ45 front connector (up to 8 TCP-IP clients)
Serial ports (COM1, COM2, COM4)	Nr.1 RS232 / RS485 switching serial port, max baud rate 115k on connector Nr.1 RS485 port, max baud rate 115k on IDC10 connector for bus and terminals
USB ports	Nr.1 microUSB port on side connector
Protocols	ModBUS TCP-IP, ModBUS RTU
Nr. Max TCP-IP Clients (Master Mode)	8
Nr. Max TCP-IP Servers (Slave Mode)	10
Nr. Max variables / tags	500
Nr. Max Modbus RTU/ASCII	128
Slave nodes	
Installation site	Manned with enabled network access

OPERATING MODE

Modbus Gateway	From ModBUS TCP-IP to ModBUS RTU From ModBUS RTU to ModBUS TCP-IP
Modbus Gateway shared memory	From ModBUS TCP-IP Client to ModBUS TCP-IP Server From ModBUS TCP-IP Client to ModBUS RTU Master / Slave From ModBUS RTU Master to ModBUS RTU Slave

Serial Device Server Remote Virtual COM

SETTINGS

DIP switches	Yes
Web server	Yes
SDD (Seneca Discovery Device)	Yes
SESC (Seneca Ethernet to Serial Connection)	Yes
EASY Z-KEY	Yes
Firmware update	Web Server, FTP, Micro SD

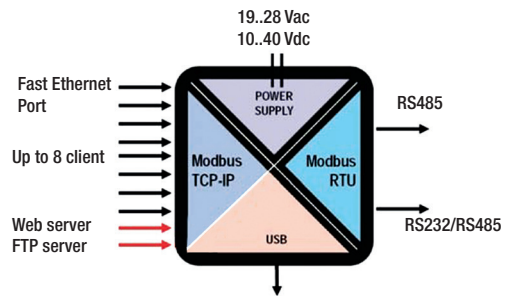
ADVANCES FUNCTIONS

Cloud BOX support	Yes
Serial communication advanced diagnostica	Yes
TAG writing by Web Server (Gateway shared memory)	Yes
Fail serial device quarantine (with settable time)	Yes

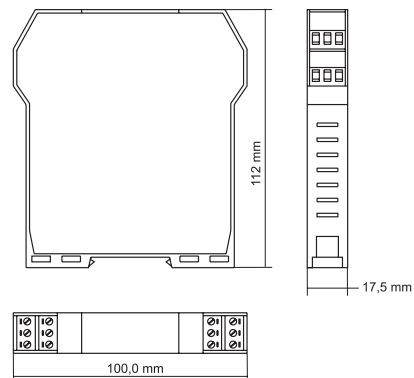
STANDARD

Approvals	CE
Norms	EN61000-6-4, EN 61000-6-2, EN 61010-1

ISOLATION /& SIGNALS DIAGRAM



DIMENSIONI



ORDER CODES

Code	Description
GATEWAY	
Z-KEY	2-Port ModBUS RTU Industrial Gateway / Serial Device Server
SERVER IOT SERVER	
CLOUD BOX	Industrial IoT PC BOX with Scada functions
SOFTWARE TOOLS	
EASY Z-KEY	Configuration tool for Z-KEY IP address
SDD	SENECA Discovery Device
SESC	SENECA Ethernet to Serial Connection
TEMP-TAG-Z-KEY	Excel template for Z-KEY tags (gateway mode)
TEMP-WEB-Z-KEY	Web page template for Z-KEY
ACCESSORIES	
CS-DB9M-MEF-PH	Serial communication cable (DB9M / MEF 10-12) 3 wires, 1,5 mt
CE-RJ45-RJ45-R	Straight-thru Ethernet cable (RJ45-RJ45)
Z-PC-DIN2-17.5	DIN rail bus system 2 slots 17.5 mm
Z-PC-DIN8-17.5	DIN rail bus system 8 slot 17.5 mm
Z-PC-DINAL2-17.5	DIN rail bus system head terminal + 2 slots 17.5 mm
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5A

Technical data, diagrams and drawings in this document are indicative only and not binding.