

Z-KEY / R-KEY-LT

1 / 2-PORT MODBUS RTU INDUSTRIAL GATEWAY / SERIAL DEVICE SERVER

- ModBUS / Ethernet ↔ Serial Gateway
- ModBUS / Serial ↔ Ethernet Gateway
- ModBUS Gateway with tags
- Serial Device Server

100% Made & Designed in Italy

SENECA

www.seneca.it

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1 / 2-PORT MODBUS RTU INDUSTRIAL GATEWAY / SERIAL DEVICE SERVER



Z-KEY and R-KEY-LT are devices that can extend networks and enable the passing of data process between different layers of the communication IT and OT. They ensure the transmission of signals between ModBUS TCP-IP / ModBUS RTU/ASCII in different modes, effectively increasing the number of nodes that can be connected and the distances that can be reached in the network. The devices can extend the serial network as well by operating as Serial Servers transparent to the serial communication protocol. Equipped of 1 Fast Ethernet 10/100 Tx port and 1 or 2 serial ports (RS232/RS485, RS485), Z-KEY and R-KEY-LT offers multiple configuration options thanks to EASY SETUP 2 (PC software), web server and software tools such as SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection). Advanced features include advanced serial diagnostics and “quarantine” mode with settable time for failing devices.

HIGHLIGHTS

MULTIFUNCTION GATEWAYS

BUILT-IN WEBSERVER

MAXIMUM FLEXIBILITY OF CONFIGURATION

EXCEL TEMPLATE FOR ASSIGNMENT AND EXPORT TAGS

SUPPORT UP TO 8 SIMULTANEOUS MODBUS TCP-IP CLIENTS

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

AUTOMATIC SCANNING FOR SEARCHING CONNECTED IP ADDRESSES

FIRMWARE UPDATE VIA WEB SERVER

QUARANTINE MODE WITH TIME SET UP

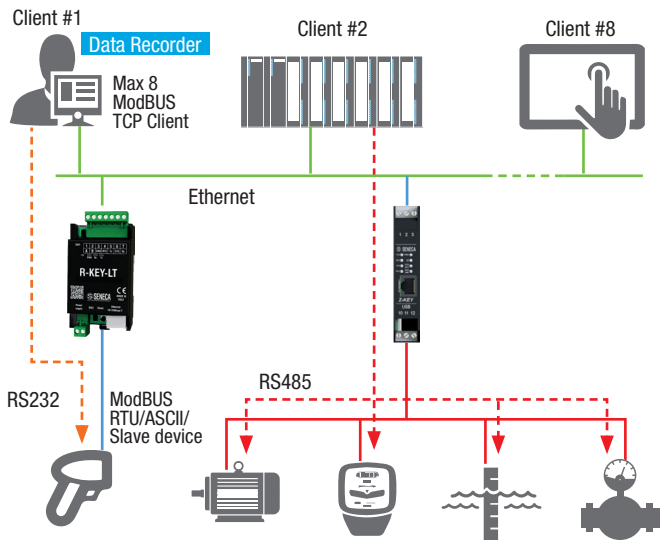
TRANSPARENT TO SERIAL COMMUNICATION PROTOCOL

WIDE OPERATING TEMPERATURE

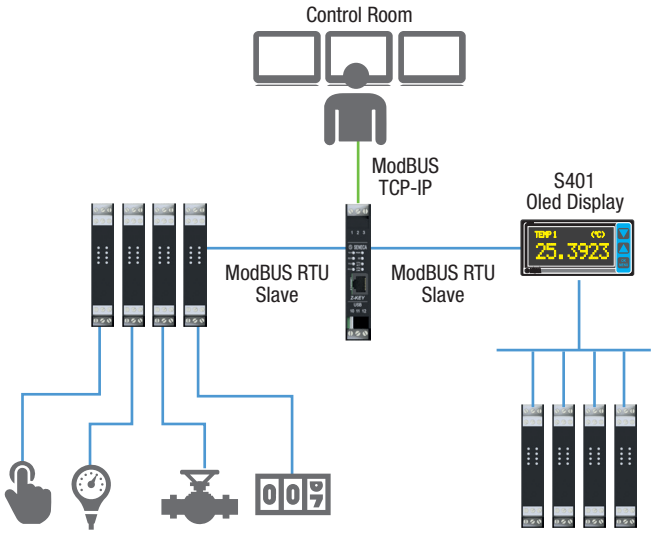
UL APPROVAL

APPLICATION EXAMPLES

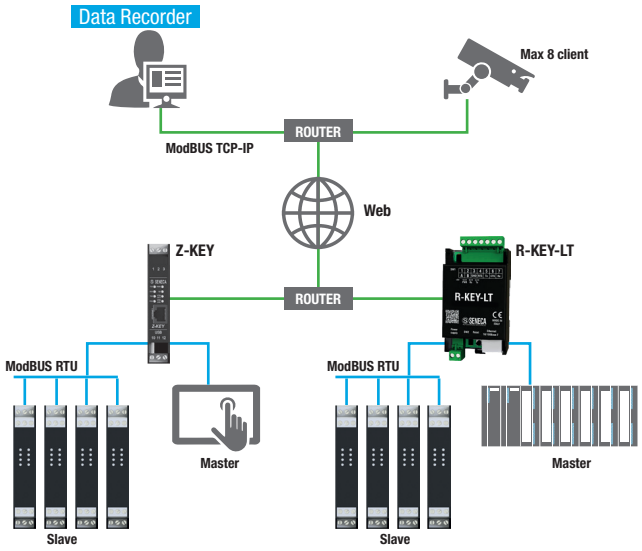
MODBUS GATEWAY
MODBUS TCP-IP → MODBUS RTU



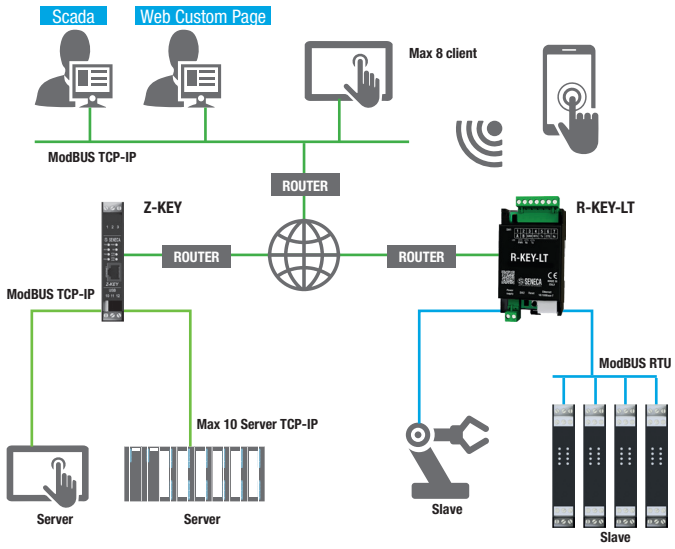
MODBUS GATEWAY
MODBUS TCP-IP → MODBUS RTU



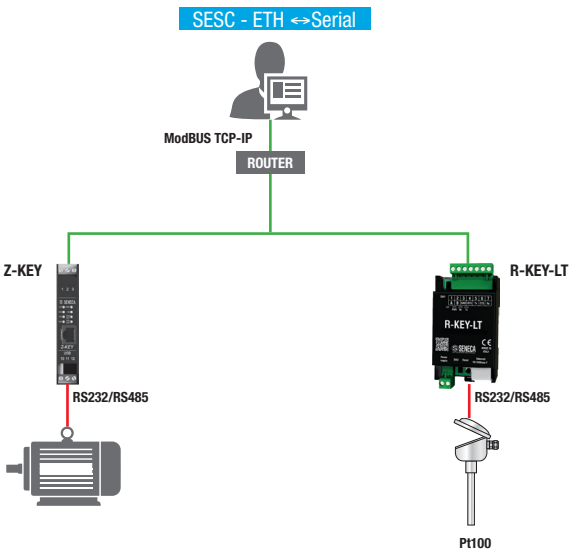
MODBUS GATEWAY WITH TAGS
MODBUS TCP-IP → MODBUS RTU MASTER/SLAVE



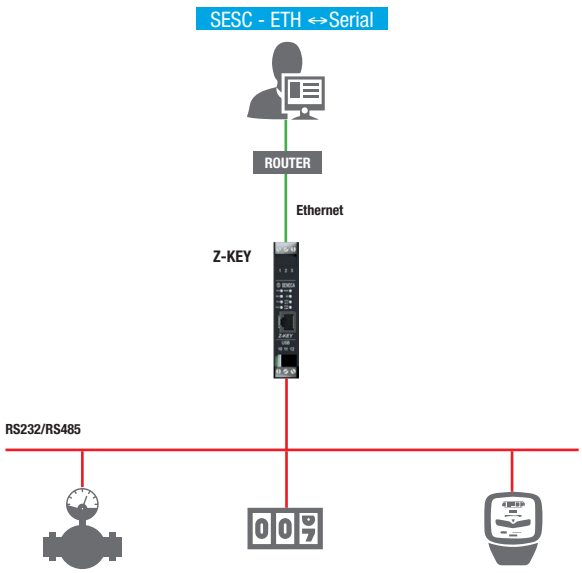
MODBUS GATEWAY WITH TAGS
MODBUS TCP-IP CLIENT → ModBUS RTU Slave / ModBU TCP-IP Server



SERIAL DEVICE SERVER



SERIAL DEVICE SERVER



Z-KEY / R-KEY-LT

	R-KEY-LT	Z-KEY
		
	1-Port ModBUS RTU/ASCII Industrial Gateway / Serial Device Server	2-Port ModBUS RTU/ASCII Industrial Gateway / Serial Device Server
GENERAL DATA		
Power Supply	10..40 Vdc; 19..28 Vac	10..40 Vdc; 19..28 Vac
Power Consumption	Max 1 W	2 W @ 24 Vac (typical)
LED - Status indicators	Power Supply Rx/Tx RS232/R485 Ethernet ACT/LNK	Power Supply Rx/Tx RS232/R485 (port 1) Rx/Tx RS232/R485 (port 2) Ethernet ACT/LNK
Isolation	1,5 kVac a 2 vie (Power//Eth)	1,5 kVac a 3 vie (Power//Eth.//Ser)
Protection degree	IP20	IP20
Operating temperature	-20..+70°C	-20..+70°C
Connections	7-way removable screw terminal, 5 mm pitch 2-way removable screw terminal, 5 mm pitch Connector on the bottom side RJ45 for Ethernet	Removable 3-way screw terminals, 5 mm pitch IDC10 rear connector for DIN rail 46277 RJ45 front connector
Dimension (wxhxd)	32 x 90 x 53 mm	17,5 x 112 x 100 mm
Weght	80 g	170 g
Case	PC/ABS self-extinguishing UL94-V0 gray color RAL 7035	Nylon PA6 30% glass fiber, self-extinguishing class V0
Mounting	For DIN Rail (IEC EN 60715)	For DIN Rail (IEC EN 60715)
Approval	CE, UL	CE, UL
COMMUNICATION		
Ethernet port	Nr.1 Fast Ethernet 100 Tx, RJ45 frontal port Up to 8 TCP-IP Clients Up to 10 TCP/IP Servers	Nr.1 Fast Ethernet 100 Tx, RJ45 frontal port Up to 8 TCP-IP Clients Up to 10 TCP/IP Servers
Serial ports	Nr.1 RS232 or RS485 serial port, max. baud rate 115kbps on connector	Nr.1 serial port on terminals, switchable RS232 / RS485, max baud rate 115kbps on connector No. 1 RS485 port on IDC10 connector for bus, baud rate max 115kbps
Communication protocols	ModBUS TCP-IP ModBUS RTU Modbus ASCII	ModBUS TCP-IP ModBUS RTU Modbus ASCII
Operating modes	ModBUS / Ethernet ↔ Serial Gateway ModBUS / Serial ↔ Ethernet Gateway Modbus Gateway con tag Serial Device Server	ModBUS / Ethernet ↔ Serial Gateway ModBUS / Serial ↔ Ethernet Gateway Modbus Gateway con tag Serial Device Server
Connectivity	Max 8 Modbus TCP-IP Clients (Server Mode) Max 500 variables (tags) Max 10 Modbus TCP-IP Servers (Client Mode) 128 MobBUS RTU/ASCII Slave Nodes	Max 8 Modbus TCP-IP Clients (Server Mode) Max 500 variables (tags) Max 10 Modbus TCP-IP Servers (Client Mode) 128 MobBUS RTU/ASCII slave nodes (per port)
SETTINGS AND ADVANCED FUNCTIONS		
Programming	EASY SETUP 2, Web Server, DIP-switch	EASY SETUP 2, Web Server, DIP-switch
Tools	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)
Traffic Monitor	Yes	Yes

ORDER CODES

Code	Description
GATEWAYS	
R-KEY-LY	1-Port ModBUS RTU/ASCII Industrial Gateway / Serial Device Server
Z-KEY-0	2-Port ModBUS RTU/ASCII Industrial Gateway / Serial Device Server
SOFTWARE TOOLS	
EASY SETUP 2	SENECA programmable device configurator
TEMP-TAG-Z-KEY	Excel template gateway mode tag management
ACCESSORIES	
CS-DB9M-MEF-PH	Serial communication cable (DB9M connector / 4-way female connector) 3 wires mt 1.5
CE-RJ45-RJ45-R	Straight ethernet cable (RJ45 / RJ45)
Z-PC-DIN2-17.5	Support for quick mounting on DIN rail 2 slots pitch 17.5 mm
Z-PC-DIN8-17.5	Support for quick mounting on DIN rail 8 slots pitch 17.5 mm
Z-PC-DINAL2-17.5	Support for quick mounting on DIN rail head + 2 slots pitch 17.5 mm
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5 A

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SENECA
Via Austria, 26 • 35127 Padova - (I) - Tel. +39 049 87.05.359
Fax +39 049 87.06.287 • www.seneca.it • info@seneca.it

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