

Z-KEY-P

PROFINET IO ↔ MODBUS RTU / ASCII / TCP-IP GATEWAY PROTOCOL CONVERTER

Highlights

- **ModBUS ↔ Profinet IO gateway**
- **3-way isolation 1.5 kVac**
- **Operating temperature -25..+65°C**
- **Nr.1 Ethernet 100BaseT port, nr.2 RS232/RS485 serial ports, nr. 1 Micro USB port**
- **Support up to 128 ModBUS RTU slave nodes and 10 ModBUS TCP-IP Servers**
- **Management up to 500 tags on shared memory**
- **Modbus RTU / ASCII / TCP-IP, Profinet IO protocols support**
- **ModBUS Pass Through function**
- **Configuration and diagnostics through Web Server, Easy Setup 2, TiA Portal, Codesys**

Gateway Z-KEY-P gateway supports automation and Industry 4.0 applications, providing high standards of performance, ease of use and security. Z-KEY-P transmits data bi-directionally between industrial Profinet IO and ModBUS RTU / ASCII / TCP-IP networks.

Equipped with 2 serial ports and 1 Ethernet 100 BaseT port Ethernet 100 BaseT port, on the Profinet IO side the device is compatible with most common most common PLCs that support the same standard. On ModBUS side it works as a Master device on the serial port able to to control a subnet with 128 ModBUS RTU/ASCII slave nodes, In Modbus TCP-IP mode it can connect with 10 Modbus TCP-IP servers and supports the connection of 1 Modbus TCP-IP client.

Z-KEY-P autonomously reads the registers of the devices on serial bus or Ethernet and allows them to be accessed by a Profinet IO controller. Up to 500 variables (tags) can be defined. Each ModBUS tag can be converted to Profinet IO. Configuration and diagnostics are carried out through a built-in web server, dedicated software Easy Setup 2, excel template (variables management and export), Simatic TiA Portal environment (in case of integration of systems with PLC Siemens) and/or Codesys PLC.

100% Made & Designed in Italy

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Z-KEY-P

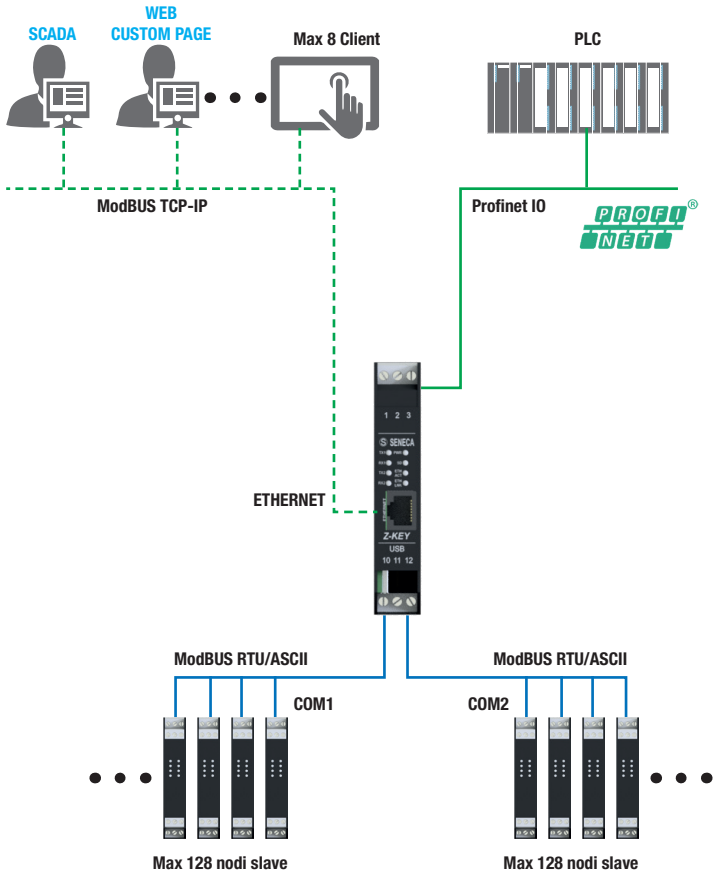


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TECHNICAL DATA

DATI GENERALI	
Power supply	11..40 Vdc; 19..28 Vac
Power consumption	1,5 W (max)
isolation	1,5 kVac @3 ways
LED status indicators	Power supply Micro SD access Profinet Communication Serial Communication Ethernet communication
Protection degree	IP20
Operating temperature	-25 °C..+65 °C
Connections	Removable 3-way screw terminals, 5 mm pitch Rear connector IDC10 for DIN rail 46277 Front RJ45 connector Micro USB side Micro SD card slot
Micro SD card	Max 32 GB
Dimension	17.5 x 100 x 112 mm
Weight	100 g
Case	PA6, black color
Mounting	35mm DIN rail IEC EN60715 in vertical position
COMMUNICATION	
Ethernet ports	Nr 1 Fast Ethernet 100 Tx, RJ45 front port (Profinet IO, ModBUS TCP-IP Client)
Serial ports (COM1, COM2)	Nr. 1 RS232 / RS485 switchable serial port, baud rate max 115k on connector (ModBUS RTU/ASCII Master) Nr. 1 RS485 port, baud rate max 115k on connector IDC10 for bus and terminals (ModBUS RTU/ASCII Master)
USB ports	Nr 1 microUSB port on side connector (ModBUS RTU Slave)
Industrial protocols	ModBUS TCP-IP, ModBUS RTU, MdoBUS ASCII, Profinet IO
Operating modes	Gateway Profinet IO ↔ModBUS RTU/TCP-IP/ASCII
Nr Max TCP-IP Servers (Client Mode)	10
Nr Max variables clients / Tags	500
N° Max Modbus RTU/ASCII nodes	128 per serial port
SETTINGS & ADVANCED FUNCTIONS	
Programming	DIP Switch (factory parameters, serial ports), Web Server, Easy Setup2, TiA Portal, Codesys
Management tools	SDD (Seneca Discovery Device)
Firmware update via USB / Web Server	Web Server
Advanced Diagnostics	Yes
ModBUS PASS Through	Yes
Third party platform support	TiA Portal / Step7, GSDML
STANDARD	
Approvals	CE
Norms	EN 61000-6-2, EN61000-6-4, EN60950-1

CONNECTION EXAMPLE



ORDER CODES

Code	Description
GATEWAY	
Z-KEY-P	Profinet IO ↔ModBUS RTU / ASCII / TCP-IP gateway - protocol converter
SOFTWARE	
EASY SETUP 2	PC software configurator
SDD	SENECA Discovery Device
SESC	SENECA Ethernet to Serial Connection
TEMP-TAG-Z-KEY	Excel template gateway mode tag management
ACCESSORIES	
CS-DB9M-MEF-1012	Serial communication cable Z-KEY series (DB9M / MEF 1012)
CE-RJ45-RJ45-R	Straight Ethernet Cable (RJ45 / RJ45)
Z-PC-DINAL2-17.5	DIN rail quick mounting bracket, head +2 slots 17.5mm pitch
Z-PC-DIN2-17.5	DIN rail quick mounting bracket 2 slots 17.5mm pitch
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5 A

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