



Z-KEY-WIFI

2-PORT MODBUS INDUSTRIAL GATEWAY SERIAL DEVICE SERVER WITH WI-FI MODULE

Highlights

- **Multifunction device: ModBUS IoT gateway (Bridge, Reverse Bridge, Shared Memory) Serial Device Server**
- **Support up to simultaneous 8 ModBUS TCP-IP clients**
- **Support up to 128 ModBUS RTU slave nodes and 10 ModBUS TCP-IP Servers**
- **Management of up to 500 tags on shared memory**
- **Modbus RTU, Modbus ASCII, ModBUS TCP-IP, custom RS232/RS485 protocols support**
- **Built-in WiFi modem: IEEE801.11 b/g/n, Access ModePoint / Station, frequency 2.4GHz**
- **Cloud BOX Support**
- **Quarantine mode with timesettable for devices in fail**
- **Customizable Web Server**

Z-KEY-WIFI is a multifunction IoT Gateway (Bridge, Reverse Bridge, Shared Memory, Serial Device Server) with nr.2 serial ports (nr.1 RS485 port, nr.1 configurable RS232/RS485 port), nr.1 Fast Ethernet 10/100 Tx port, nr.1 IEEE 801.11 a/b/g/n WiFi module compliant with security standards WEP / WPA / WPA2 and 2.4 GHz operating frequency. In gateway mode the device supports up to 8 TCP client connections and 500 tags on shared memory.

The Wi-Fi connection can be used in order to extend the acquisition system (Station) or to create a dedicated LAN (Access Point). The connections from Ethernet port and Wi-Fi are independent (separate network configurations each other).

Z-KEY-WIFI supports Modbus RTU, Modbus ASCII, custom RS232/RS485, NTP, http POST protocols.

The module is configurable via DIP switch, web server, EASY SETUP APP for mobile devices. Z-KEY-WIFI can be integrated into the SENECA solution on premise "Cloud BOX" with the possibility of sending data in the Cloud supporting HTTP POST protocol.





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TECHNICAL DATA

GENERAL DATA

Power supply	11..40 Vdc; 19..28 Vac, 50–60 Hz
Power consumption	Typical: 2 W @ 24Vdc, Max: 3 W @ 24 Vac
Isolation	1.500 Vac @ 3 ways
LED status indicators	Power supply Micro SD access Rx-Tx serial communication Ethernet Link and traffic WiFi signal power Access Point mode Station mode
Micro SD card	Max 32 GB
Protection degree	IP20
Operating temperature	-20°C..+70 °C
Dimension (wxdxh)	102,5 x 35 x 111 mm
Weight	220 g
Case	PA6 glass filled, black color
Mounting	For 35 mm rail IEC EN 60715

COMMUNICATION

Ethernet ports (ETH1, ETH2)	Nr 1 Fast Ethernet 10/100 Tx port, RJ45 front connector, up to 8 TCP-IP Clients
Serial ports (COM1, COM2, COM4)	Nr.1 RS232 / RS485 switchable serial port, baud rate max 115k on connector Nr.1 RS485 port, baud rate max 115k on IDC10 connector for bus and terminals
USB ports	Nr.1 Micro USB port
WiFi ports	IEEE 801.11 b/g/n Security WEP / WPA / WPA2
Communication protocols	ModBUS RTU, ModBUS ASCII, ModBUS TCP-IP, NTP, http post
Security protocols	Wep/WPA/WPA2 (only Wifi)
Operating mode	ModBUS Gateway, ModBUS Gateway shared memory, Transparent Gateway, Wi-Fi Station / Access Point, Serial Sniffer
Cloud BOX support	Yes

CONNECTIVITY

Max Nr.Client TCP-IP (Server Mode)	8
Max Nr.Server TCP-IP (Client Mode)	10
Max Nr variables / Tags Clients	500
Max Nr.Slave Modbus RTU/ASCII Slave nodes	128 per serial port

SETTINGS & SOFTWARE

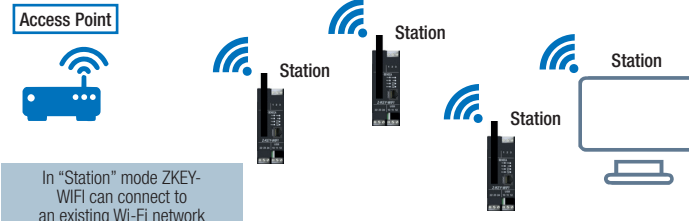
Configuration and Diagnostic	DIP Switch, Web Server EASY SETUP APP (App mobile via USB and Wi-Fi)
Serial communication tools	SDD (Seneca Discovery Device) SESC (Seneca Ethernet to Serial Connection) Web Server
Firmware update	FTP Micro SD
Advanced functions	Cloud BOX support, Advanced diagnostic Quarantine mode with settable time

STANDARD

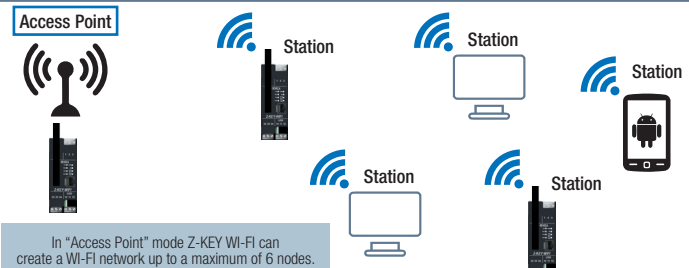
Approvals	CE
Norms	EN60950, EN62311, EN301489-1 V2.1.1, EN301489-17 V3.1.1, EN300328 V2.1.1

OPERATING MODES

STATION

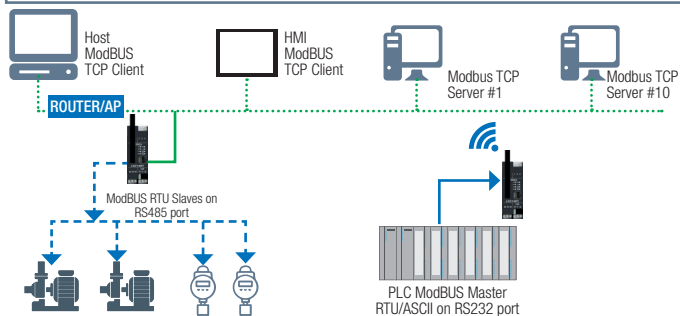


ACCESS POINT

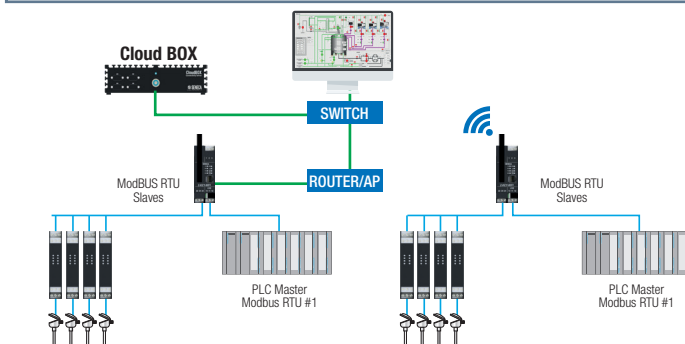


APPLICATION CASES

MODBUS GATEWAY SHARED MEMORY – HTTP PROTOCOL



MODBUS GATEWAY SHARED MEMORY – HTTP PROTOCOL



ORDER CODES

Code	Description
Z-KEY-WIFI	2-port ModBUS industrial gateway / serial device server with Wi-Fi module
SOFTWARE	
EASY SETUP	SENECA programmable instruments suite
EASY SETUP APP	Android EASY SETUP Mobile App Version
SDD	SENECA Discovery Device
SESC	SENECA Ethernet to Serial Connection
ACCESSORIES	
MSD	MicroSD card with SD adapter
CU-A-MICRO-OTG	Adapter cable MicroUSB OTG - USB Type A
CU-A-MICROB	USB-A Micro USB-B 5 P plug cable
CS-DB9M-MEF-1012	Z-KEY serial communication cable (DB9M / MEF 10-12)
CE-RJ45-RJ45-R	Straight Ethernet cable (RJ45 / RJ45)
Z-PC-DINAL1-35	DIN rail quick mounting bracket, head + 1 slot, 35 mm
Z-PC-DIN1-35	DIN rail quick mounting bracket 1 slot, 35mm
Z-PC-DIN4-35	DIN rail quick mounting bracket, 4 slot 35mm