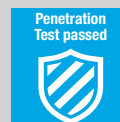# Z-PASS1-RT

VPN IIoT Edge Gateway

Highlights

- **Industrial Gateway, SerialDevice Server, Bridge**
- **Serial protocols: ModBUS TCP server, ModBUS RTU master/ slave, FTP/SFTP server, HTTP/ HTTPS server**
- **IoT protocols: MQTT, OPC UA, http post**
- **Nr.2 Fast Ethernet ports10/100Tx on front RJ45**
- **Nr.1 switchable serial port RS232/RS485**
- **Nr.2 RS485 serial ports**
- **Nr.1 USB host port**
- **Nr.6 DI/DO channels and Nr.2 Anolog input**
- **Remote Assistance (P2P) and Telecontrol (SingleLAN) connection with LET'S platform**
- **Cybersecurity Certificate (penetration testing) OWASP, NIST 800-115, Risk Analysis,IEC 62443**

Z-PASS1-RT is an industrial gateway / serial device server enabling a virtually unlimited number of client nodes. The device features 2 analog inputs and 6 general-purpose digital (DI/DO) channels that can beconfigurable. Equipped with 2 Fast Ethernet ports (manageable in Switch and LAN/WAN mode), 3 serial ports and 1 USB host 2.0 port, Z-PASS1-RT supports ModBUS TCP server, ModBUS RTU master, ModBUS RTU slave, FTP server, SFTP server, HTTP server, HTTPS server, OpenVPN protocols. The device is easily configured via Web Server. Integrated into the LET'S platform, Z-PASS1-RT can support Point-To-Point Remote Assistance or Single LAN Telecontrol connection mode. The gateway complies with the most severe IT security standards starting with compliance with penetration testing conducted according to OWASP, NIST 800 115 Risk Analysis and IEC 62443.

Penetration Test passed

BUILT-IN I/O
I/O

Industry 4.0 ready

LET'S VPN CONNECTIVITY SOLUTIONS

100% Made & Designed in Italy

SENECA

www.seneca.it

Z-PASS1-RT

VPN IIoT Edge Gateway

TECHNICAL DATA

GENERAL DATA

Power supply	11..40 Vdc
Power consumption	Max 6 W
Isolation	1,500 Vac (power supply // other circuits)
LED Status indicators	Input / Output Status Remote Connection (RCD) - VPN Connection (VPN) LAN/WAN (Ethernet mode) - SERV (VPN BOX Service) Rx-Tx serial communications - Ethernet links and traffic
Protection degree	IP20
Operating temperature	-25..+65°C
Dimensions (lxhxp)	35x100x112 mm
Weight	240 g
Case	Fiber glass-filled, black PA6 plastic
Mounting	For 35 mm DIN rail IEC EN 60715
Approvals	CE, UKCA

COMMUNICATION

Ethernet ports (ETH1, ETH2)	Nr.2 Fast Ethernet 10/100Tx ports on RJ45 front connector
Serial Ports (COM1, COM2, COM4)	Nr.1 RS232 / 485 serial port switchable via software, baud rate max 115 kbps on connector Nr.1 RS485 port, baud rate max 115 kbps on connector IDC10 for bus and terminals Nr.1 RS485 port, baud rate max 115 kbps on terminals
CAN port	Nr.1 CAN port (terminals)
USB ports	Nr.1 USB host port on side connector type A Nr.1 Micro USB port (debug)
Serial protocols	ModBUS TCP server, ModBUS RTU master/ slave, FTP/SFTP server, HTTP/HTTPS server
IoT Protocols	MQTT, OPC UA, http post
Max nr. VPN clients	Virtually unlimited
Operating mode	ModBUS Gateway; ModBUS Gateway shared memory; Transaparent gateway; Serial Device Server; LAN Router; Datalogger; Remote alarm unit; Remote access VPN unit; LAN/WAN Switch; Nat 1:1; StaticRouter

CPU AND MEMORY

|	
ARM processor	32 bits
Flash Memory (data)	≥4 GB
RAM	512 MB
Micro SD slot	Yes, Max 32 GB
I/O	Nr.6 configurable DI/DO, Nr.2 Analog inputs (mA, V)

SECURITY

Remote access lock	Mechanical, digital input
LAN/WAN Separation	Yes
Authentication	2-Factor (Google Authenticator)
Permission management	Supervisor / Users / Groups
Encryption algorithm (data encryption)	OpenVPN AES-256bit-CBC + Auth SHA256 bit or user selectable
Fixed TCP-IP ports for remote assistance	Yes
Security protocols	OpenVPN, SSL, HTTPS Server, MQTT over SSL/TLS, TLS 1..2 or higher
SSL/TLS certificates	Automated TLS certificate management for HTTPS
Cybersecurity certificate (penetration testing)	Yes, OWASP, NIST 800-115, Risk Analysis, IEC62443

SETTINGS & SOFTWARE

Programming	Web Server
VPN management software	OpenVPN, VPN Client Communicator
Management tool	SDD (Seneca Discovery Device), SESC (Seneca Ethernet to Serial Connection)
Advanced Diagnostics	Yes
Logic If Then Else	Yes
LET'S VPN remote assistance/telecontrol support	Yes

CONNECTIVITY
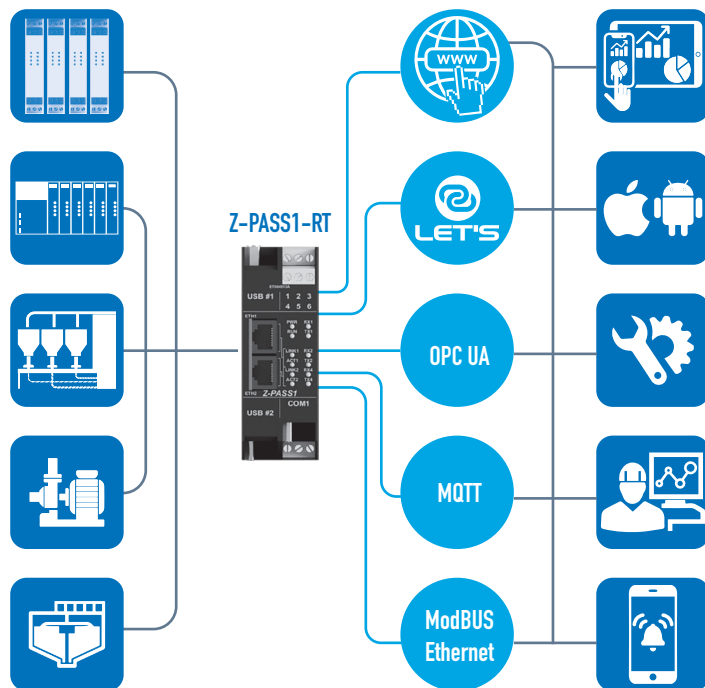
Z-PASS1-RT

ORDER CODES

Code	Description
GATEWAY	
Z-PASS1-RT	VPN IIoT Edge Gateway
VPN SERVER	
VPN-BOX-2	PC Box - VPN Server for simulteneous connections and low latency Poin-To-Point / Single LAN
VPN-BOX-2-D	Test service on VPN-BOX-2 Point-to-Point valid for 30 days max 2 devices
VPN-BOX-2-VM	VPN-BOX-2 Virtual Machine
VPN-BOX-2-VM-D	VPN-BOX-2 Point-to-Point / Single LAN Virtual Machine max 2 devices
VPN-CC-2	VPN Client Communicator, remote access software VPN-BOX-2
SOFTWARE TOOLS	
SDD	SENECA Discovery Device
SESC	SENECA Ethernet to Serial Connection
ACCESSORIES	
CS-TIP-MEF-PH	Serial communication cable (Tips / 4-way female connector)
CS-DB9M-MEF-PH	Serial communication cable (DB9M connector / 4-way female connector)
CE-RJ45-RJ45-R	Straight ethernet cable (RJ45 / RJ45)
MSD	Micro SD memory card with adapter
Z-PC-DIN1-35	DIN rail quick mounting bracket 1 slot 35 mm pitch
Z-PC-DIN4-35	DIN rail quick mounting bracket 4 slots 35mm pitch
Z-PC-DINAL1-35	Support for quick mounting on DIN rail head + 1 slot 35 mm pitch

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