

Z-PASS1 • Z-PASS2

MULTIFUNCTION COMMUNICATION INTERFACES



ETHERNET

TUNNELLING

SERIAL DEVICE SERVER

BRIDGE

MODBUS

3G

VPN

GATEWAY

ROUTER

REDUNDANCY

MODEM

VIRTUAL COM

REMOTE ASSISTANCE



New Seneca's standard for industrial networking

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Z-PASS1 and **Z-PASS2** set a new standard of industrial networking. Both are multifunction devices as gateway, serial device server and bridge up to a maximum of 32 clients simultaneously connected. It is possible to manage LAN to LAN and M2M connections via VPN technology without need of expensive SIM Card equipped with static IP.

The modules can be configured and updated locally (USB) or even remotely through web server. Besides, **Z-PASS2** carries out 3G / Ethernet router functions, redundant communication system and access point for remote management.

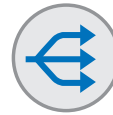
 **Z-PASS1/Z-PASS2**

 **Z-PASS2**



MODBUS BRIDGE

Protocol conversion, data acquisition and registration from PLC or SCADA systems, 3 enabled TCP ports ports enabled, up to 32 simultaneous connections for each port, VPN client.



GATEWAY

Communication interface between RS485 and (Modbus RTU) Ethernet network (Modbus TCP/IP) using 1 / 2 Master ports and 1 / 2 Slave ports, management up to 32 simultaneous Modbus TCP/IP client.



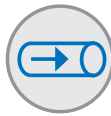
SIM

Use of standard SIM. Not required SIM Card equipped with static IP.



REMOTE VIRTUAL COM

Transparent to any serial communication protocol.



VPN

Safe connection for the management of remote devices, connection without interfering with company network, Server and Client VPN Network configuration through VPN Center.



TUNNELING

P2P UDP / TCP tunnel for safety VPN communication and transparent to serial protocol. It's suitable for applications of signal mirroring with PLC master Modbus, cable replacement, extension of serial network through LAN/3G and tunnel P2MP / UDP.



WEB SERVER

Safe configuration also remotely, customizable pages using PHP and CGI support.



SERIAL DEVICE SERVER

Modbus RTU - Modbus TCP-IP transparent mode conversion (Remote Serial COM, Tunneling) for the connection of any serial device to a LAN interface.



3G / ETHERNET ROUTER

Remote Management 3G (USPA+)/ Ethernet, safe communication via VPN, transparent to any IP (not real time) communication protocol, no need of SIM Card equipped with static IP.



REMOTE ASSISTANCE

Access points for remote control / remote assistance through the use of local IP with the possibility of communication between different networks via VPN.



REDUNDANCY

Communication system fault-tolerant/ Secure (in the medical, oil&gas, energy, public networks, critical applications and 24/7 fields).



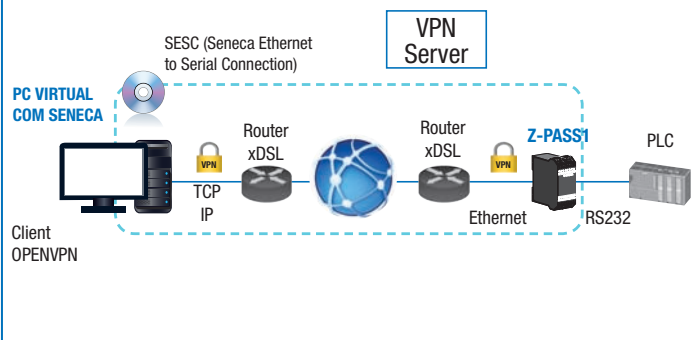
BUILT-IN MODEM

UMTS, HSDPA, EDGE, GSM, GPRS

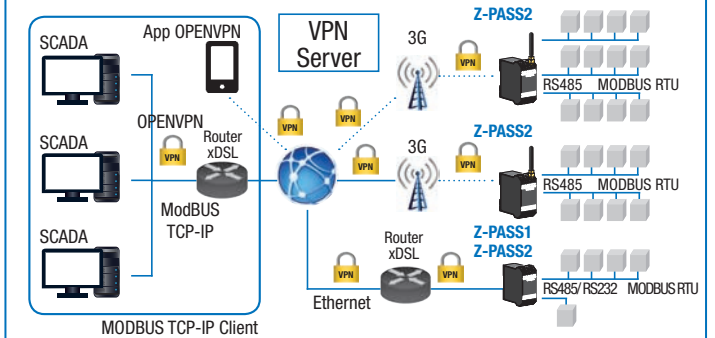
Z-PASS1 • Z-PASS2 - MULTIFUNCTION COMMUNICATION INTERFACES

EXAMPLES OF CONNECTION

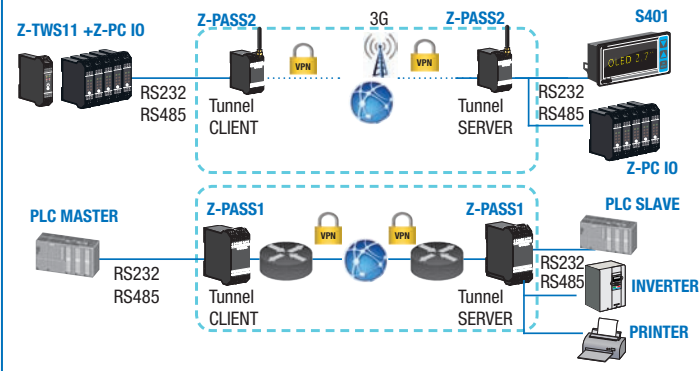
REMOTE VIRTUAL COM (Z-PASS1) Z-PASS1



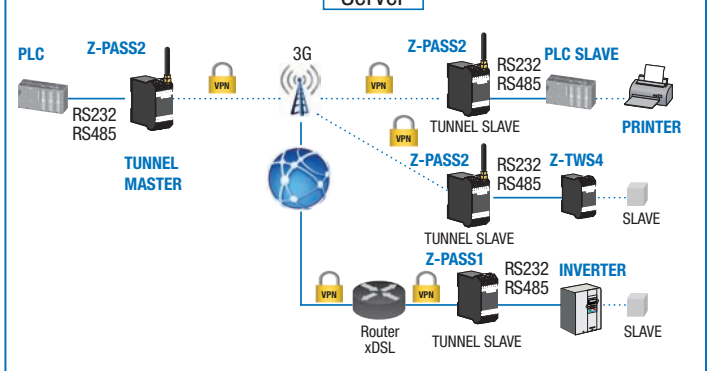
MODBUS BRIDGE Z-PASS1/2



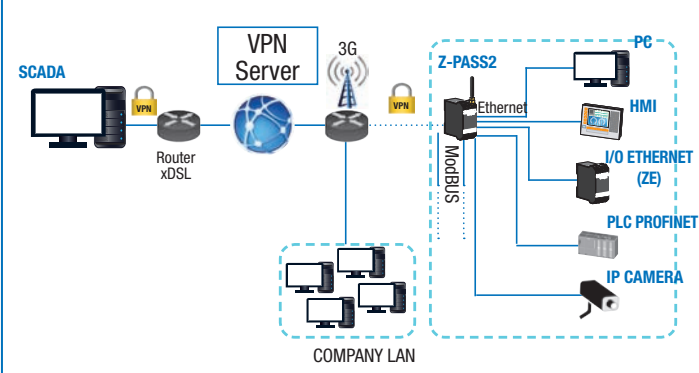
TUNNEL P2P UDP/TCP Z-PASS1/2



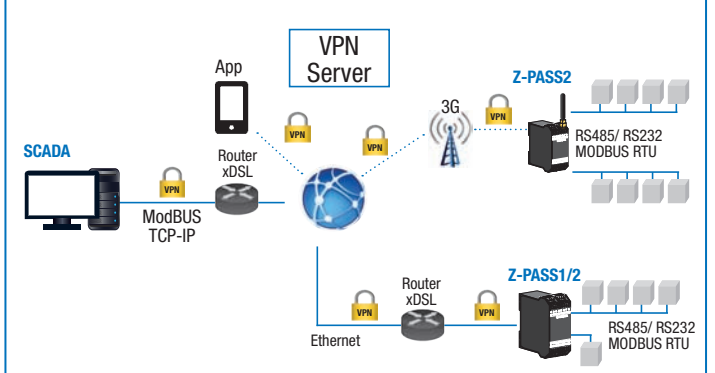
TUNNEL P2MP UDP Z-PASS1/2



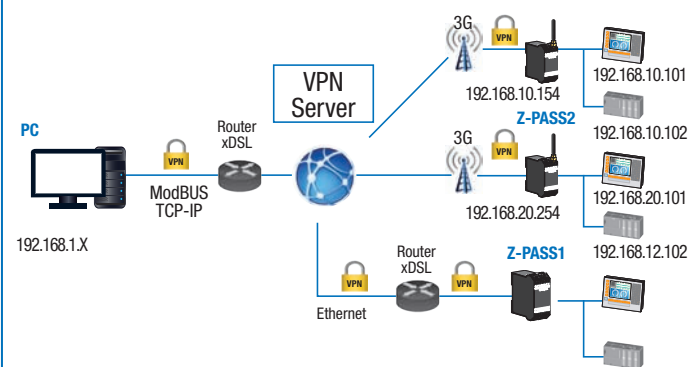
3G / ETHERNET INDUSTRIAL ROUTER Z-PASS1/2



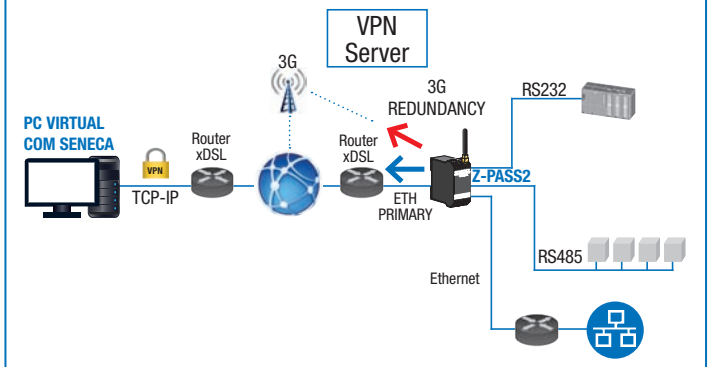
VPN Z-PASS1/2



REMOTE MANAGEMENT WITH LOCAL ADDRESSES LAN to LAN Z-PASS1/2



NETWORK REDUNDANCY ETH/3G Z-PASS2



Z-PASS1 • Z-PASS2 - MULTIFUNCTION COMMUNICATION INTERFACES

TECHNICAL FEATURES



Z-PASS1
VPN Industrial Gateway
Serial Device Server



Z-PASS2
VPN Industrial Gateway
Serial Device Server
3G/Ethernet Router

GENERAL DATA

Power Supply DC	11..40 Vdc; 19..28 Vac	11..40 Vdc; 19..28 Vac
Power Consumption max	4 W @ 24Vac, Max 6 W	4 W @ 24Vac, Max 6 W
Isolation	1500 Vac	1500 Vac
Status Indicators	Power Supply Rx-Tx serial communication Link and Ethernet PLC function	Power supply Px-Tx serial communication Link and Ethernet PLC function Modem Status
Degree of pollution	2	2
Protection Degree	IP20	IP20
Operating Temperature	-20 °C..+55 °C	-20 °C..+55 °C
Dimension (wxhxd)	100 x 35 x 112 mm	100 x 52,5 x 112 mm
Housing	Nylon PA6 with glass-fiber	Nylon PA6 with glass-fiber
Connections	Removable screw terminals 3-way, 5 mm	Removable screw terminals 3-way, 5 mm
Mounting	35 mm DIN rail guide IEC EN 60715	35 mm DIN rail guide IEC EN 60715

COMMUNICATION

Ethernet	Nr. 2 10/100Tx on RJ45 frontal port	Nr. 2 10/100Tx on RJ45 frontal port
Serial Ports	Nr.1 RS232 / 485 switchable serial port, max 115k baud rate on connector Nr.1 RS485, baud rate max 115k on IDC10 connector for bus and terminals Nr.1 RS485, baud rate max 115k on terminals	Nr.1 RS232 / 485 switchable serial port, baud rate max 115k on connector Nr.1 RS485, baud rate max 115k on IDC10 connector for bus and terminals Nr.1 RS485, baud rate max 115k on terminals
USB	Nr.1 USB host on side connector Nr.1 USB otg on micro-USB side connector	Nr.1 USB host on side connector Nr.1 USB otg on micro-USB side connector
Modem	-	UMTS, HSDPA (dual band) ; EDGE, GPRS, GSM (quad band)

FEATURES

ModBUS Bridge	x	x
Gateway	x	x
Remote Virtual COM	x	x
Tunnel P2P / P2MP / TCP / UDP	x	x
3G / Ethernet Industrial Router		x
VPN	x	x
Remote control with local addresses	x	x
Remote maintenance with local addresses	x	x

CPU AND MEMORY

CPU	ARM 32 bit	ARM 32 bit
Flash Memory (data)	1 GB	1 GB
RAM	64 MB	64 MB
Slot Micro SD	YES	YES
Micro SD CARD (not included)	Max 32 GB	Max 32 GB

SETTINGS

Web server	YES	YES
Seneca VPN Manager	YES	YES
Seneca Discovery Device	YES	YES
SESC (Seneca Ethernet to Serial Connection)	YES	YES

NORMS & APPROVALS

Approvals	CE	CE
Norms	EN61000-6-4 (electromagnetic emissions - industrial environments) EN61000-6-2 (electromagnetic immunity - industrial environments) EN61010-1 (security)	EN61000-6-4 (electromagnetic emissions - industrial environments) EN61000-6-2 (electromagnetic immunity - industrial environments) EN60950 (security), EN301 511, EN301 489-1, EN301 489-7

ORDER CODES

Code	Description
Z-PASS1-A	VPN Industrial Gateway, Serial Device Server, 3 RS485 serial ports
Z-PASS1-B	VPN Industrial Gateway, Serial Device Server, 2 RS485 and 1 RS232 serial port
Z-PASS2-A	VPN Industrial Gateway, Serial Device Server, 3G/Ethernet Router, 3 RS485 serial ports
Z-PASS2-B	VPN Industrial Gateway, Serial Device Server, 3G/Ethernet Router, 2 RS485 and 1 RS232 serial port

SOFTWARE

SIVCS	SENECA VPN Center
SDD	SENECA Discovery Device, IP scanner for Z-KEY, Z-PASS1, Z-PASS2
SESC	SENECA Ethernet to Serial Connection for Z-KEY, Z-PASS1, Z-PASS2

ORDER CODES

Code	Description
ACCESSORIES	
A-GSM	Dual band swing GSM external antenna, cable 3,2 m, SMA
A-GSM-QUAD	High performance Quadband GSM Antenna
CS-DB9M-MEF-1012	Z-KEY / RS232-DB9M serial connection cable
MSD	Micro SD memory card with adapter
Z-PC-DIN1-35	DIN rail bus support, 1 slot, step 35 mm
Z-PC-DIN4-35	DIN rail bus support, 4 slots, step 35 mm
Z-PC-DINAL1-35	DIN rail bus / power supply support, 1 slot, step 35 mm
Z-PC DINAL2-52.5	DIN rail bus / power supply support, 2 slot, step 52,5 mm, 17.5 mm



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