100% Made & Designed in Italy
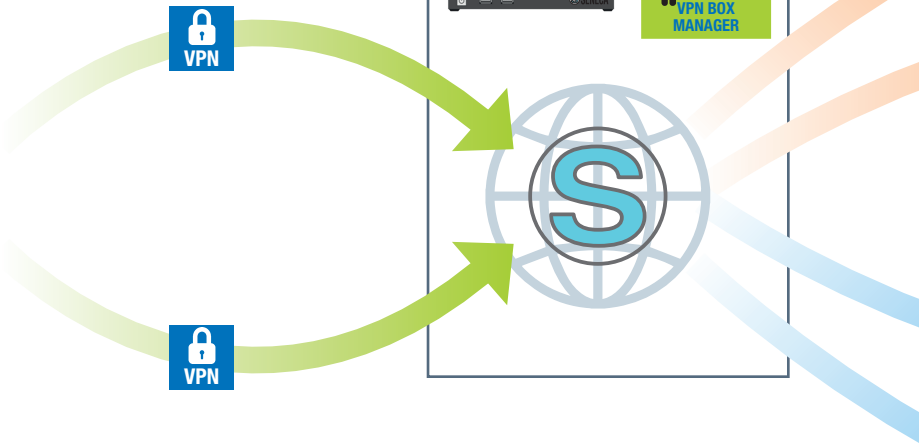
LET'S
VPN CONNECTIVITY
SOLUTIONS

SENECA

CONNECT TO YOUR PLANTS EVERYWHERE WITH MAXIMUM SAFETY

Single LAN - Telecontrol Connections

REMOTE MONITORING

SCADA

VPN CLIENT COMMUNICATOR

CONTROL ROOM

VPN CLIENT COMMUNICATOR

VPN

VPN

VPN BOX
Connectivity Server

VPN BOX MANAGER

Point-To-Point - Remote Assistance Connections

REMOTE MONITORING

REMOTE MAINTENANCE

VPN CLIENT COMMUNICATOR

DATA CENTER

VPN CLIENT COMMUNICATOR

DIAGNOSTIC

VPN CLIENT COMMUNICATOR

MOBILE MONITORING

VPN CLIENT COMMUNICATOR

VPN

VPN

VPN

VPN

VPN BOX
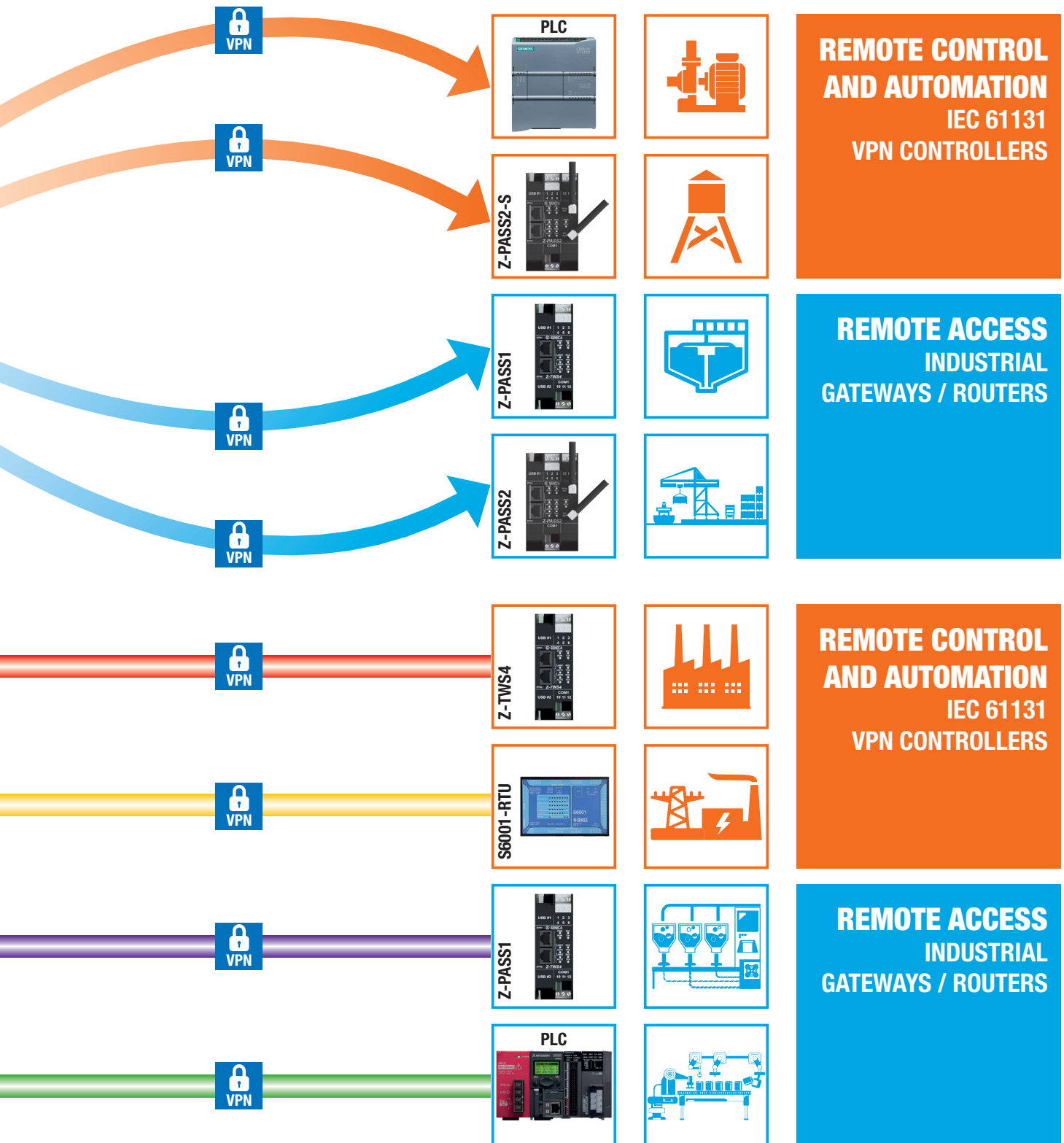Connectivity Server

VPN BOX MANAGER
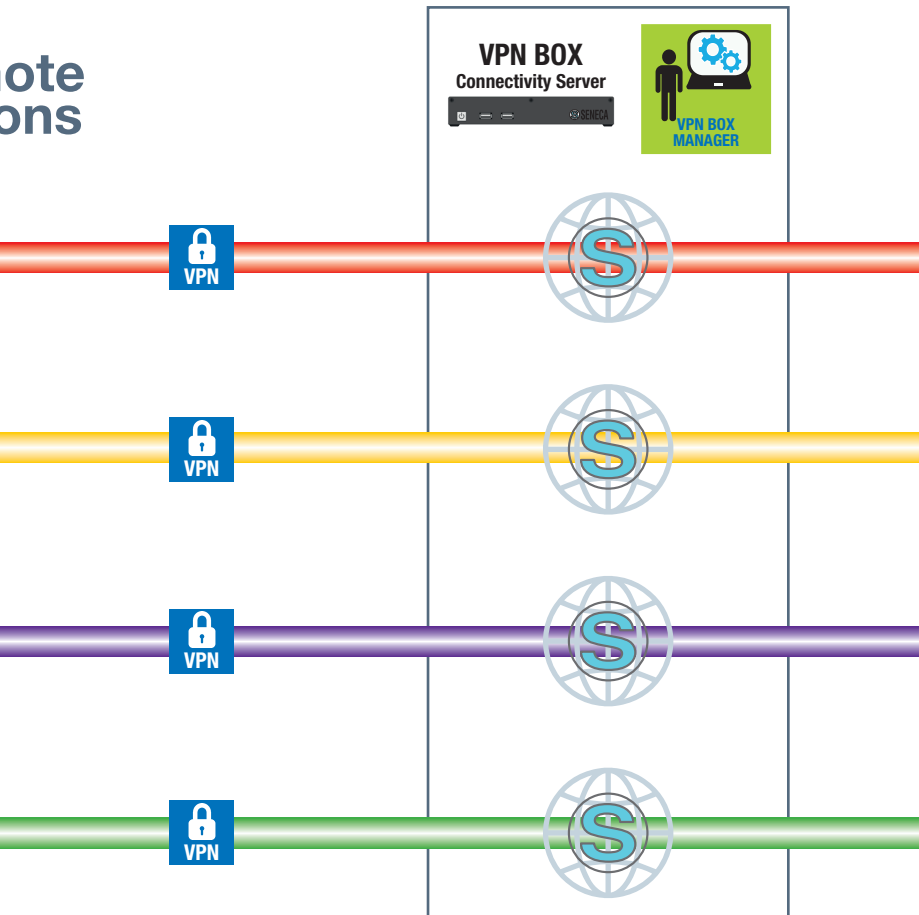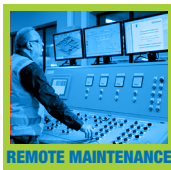
WHY CHOOSE LET'S?

ACCESS for remote accessing and connecting with machines, installations, PLCs, RTUs, meters and industrial devices with Point-To-Point connections or Single LAN connection modes

MONITORING for supervising, maintaining, firmware and programs updating in remote plants and machines

CONTROL for remote automation, settings and regulation as if you were in field

VPN	PLC		**REMOTE CONTROL AND AUTOMATION** IEC 61131 VPN CONTROLLERS
VPN	Z-PASS2-S		
	Z-PASS1		**REMOTE ACCESS** INDUSTRIAL GATEWAYS / ROUTERS
VPN	Z-PASS2		
VPN			
VPN	Z-TWS4		**REMOTE CONTROL AND AUTOMATION** IEC 61131 VPN CONTROLLERS
VPN	S6001-RTU		
VPN	Z-PASS1		**REMOTE ACCESS** INDUSTRIAL GATEWAYS / ROUTERS
VPN	PLC		

LET'S - VPN CONNECTIVITY SOLUTIONS

LET'S - COMPONENTS

SERVER	GATEWAY / ROUTERS		SOFTWARE
VPN BOX	Z-PASS1	Z-PASS2	

CONTROLLERS / RTUs

Z-PASS2-S   S6001-RTU   Z-TWS4   S6001-PC

LET'S - SUPPORTED TECHNOLOGIES

SERIAL PROTOCOLS	LAN PROTOCOLS	CONNECTIVITY	WEB SERVER
MODBUS RTU RS232 / RS485	PPP - HTTP - SMTP	VPN / IOT	

ETHERNET	WIRELESS	IEC 61131	SINGLE LAN / P2P
MODBUS TCP-IP	UMTS & HDSPA EDGE GPRS - GSM	NOR AND OR	
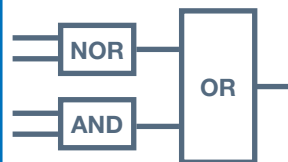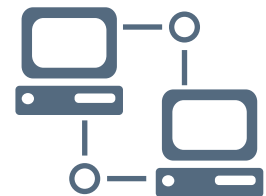
OPPORTUNITY

- 100% MADE, DESIGNED & SUPPORTED IN ITALY
- MULTI-FUNCTION DEVICES
- FLEXIBLE PROGRAMMING
- MODBUS EXPANDIBILITY
- MULTI-PROTOCOL MANAGEMENT
- INDUSTRIAL RELIABILITY
- SAFEGUARD PLANT AUTOMATION ASSET
- BEST IN CLASS PRICE / PERFORMANCE

LET'S - VPN CLIENTS - GATEWAYS / ROUTERS

FUNCTIONS	Z-PASS1	Z-PASS2
ModBUS Bridge	✔	✔
ModBUS Gateway	✔	✔
ModBUS calling optimization	✔	✔
Remote / Virtual COM Port	✔	✔
Tunnel Point-To-Point (TCP-UDP) / Point-To-Multi-Point (UDP)	✔	✔
3G+ / Ethernet Modem Router -	-	✔
Network Redundancy	-	✔
OpenVPN full support	✔	✔
Single LAN – Telecontrol	✔	✔
Point-To-Point – Remote Assistance	✔	✔
Web Server	✔	✔
Ethernet LAN/WAN mode	✔	✔

LET'S - VPN CLIENTS - CONTROLLERS

FUNCTIONS	Z-TWS4	Z-PASS2-S	S6001-RTU	S6001-PC
Modem / Router 3G+ -	-	✔	✔	✔
Ethernet ports	2	2	1	1
Serial ports	3	3	3	3
USB ports	2	2	2	2
Industrial protocols	ModBUS RTU/TCP-IP,	ModBUS RTU/TCP-IP	ModBUS RTU/TCP-IP	ModBUS RTU/TCP-IP (slave)
IT protocols	http, ftp, smtp, ppp	http, ftp, smtp, ppp	http, ftp, smtp, ppp	http, ftp, smtp, ppp
Energy protocols	IEC 60870-101/104, IEC 61850 (opt.)	IEC 60870-101/104, IEC 61850 (opt.)	IEC 60870-101/104, IEC 61850 (opt.)	-
OpenVPN full support	✔	✔	✔	✔
Single LAN – Telecontrol	✔	✔	✔	✔
Point-To-Point – Remote Assistance	✔	✔	✔	✔
Built-in I/Os			15+2DI, 8DO, 4AI, 2AO	15+2DI, 8DO, 4AI, 2AO
Software	Straton, ZNET4	Straton, ZNET4	Straton, ZNET4	HMI
IEC 61131 SoftPLC and Libraries	✔	✔	✔	-
Ethernet LAN/WAN mode	-	✔	-	-

LET'S - VPN SERVER CONNECTIVITY MODULE

VPN BOX
Connectivity Server

SENECA

Connections
• **Up to 496 supported devices**
• **Server installed on customer's network with static public IP**
• **Remote Assistance / Point-to-Point and Telecontrol/ Single LAN remote connection modes**

System Configuration
• **Easy VPN configuration**
• **Server Configuration with free specific software**
• **Enabling SSL for remote access connections**
• **Update via USB Flash drive**

Version
• **Device / Appliance HW**
• **Software / Virtual Machine**

LET'S - SOFTWARE

VPN Manager S

VPN BOX MANAGER
• VPN BOX configuration
• Communication among different nodes
• Server management (backup, restore, device operations…)
• VPN network access authentication

VPN Client S

VPN CLIENT COMMUNICATOR
• VPN network connection software
• VPN connection software on every client
• Authentication request for VPN BOX Manager query

VPN AND TUNNELLING
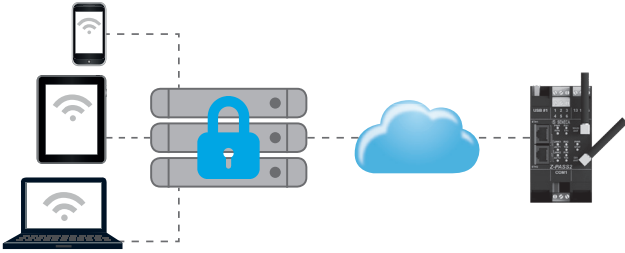
VPN (Virtual Private Network)

A Virtual Private Network (VPN) extends a private network across a public network, such as the Internet. It allows users to send and receive data across shared or public networks as if their computing devices were directly connected; in this way they take advantages of the functionality, security and management policies of the private network.

VPN Tunnelling

A VPN is created using virtual Tunneling techniques and traffic Encryption.

Industrial VPN

Ethernet distributed subnets connection including automation and control equipment such as PLCs, inverters, HMI, serial devices, sensors, actuators etc.

OPEN VPN

OpenVPN

OpenVPN is an open-source VPN protocol that implements tunneling (VPN) techniques for creating secure point-to-point or site-to-site connections. In routed or bridged configurations and remote access facilities.
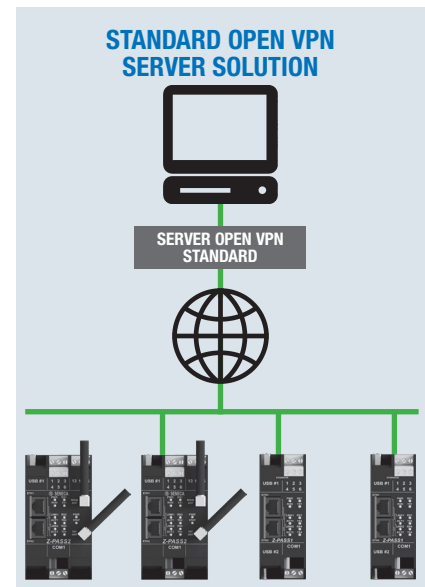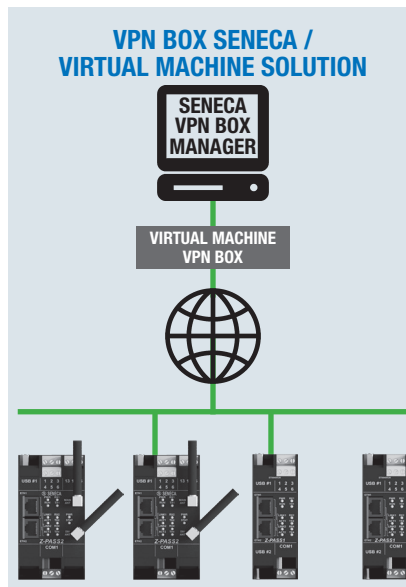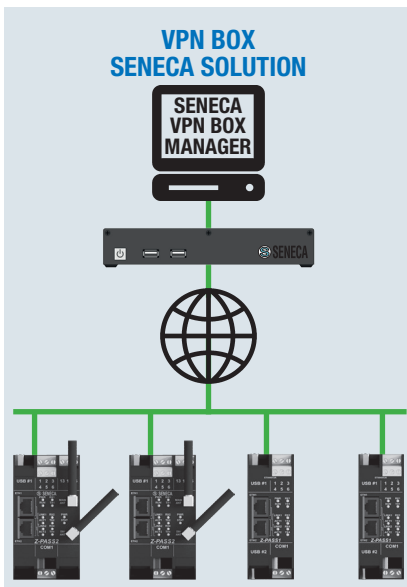
Security

It uses the OpenSSL encryption library extensively, as well as the SSLv3/TLSv1 protocols, and contains many security and control features.

Autentication

When used in a multi client-server configuration, OpenVPN allows the server to issue an authentication certificate for each client.

SENECA VPN SOLUTIONS

VPN BOX
SENECA SOLUTION

SENECA VPN BOX MANAGER

VPN BOX SENECA /
VIRTUAL MACHINE SOLUTION

SENECA VPN BOX MANAGER

VIRTUAL MACHINE VPN BOX

STANDARD OPEN VPN
SERVER SOLUTION

SERVER OPEN VPN STANDARD

TELECONTROL VS REMOTE ASSISTANCE SCENARIOS

	REMOTE ACCESS SINGLE LAN - TELECONTROL	REMOTE ACCESS POINT-TO-POINT - REMOTE ASSISTANCE
Typical application	Monitoring, maintenance, supervision, data acquisition, local automation, alarm management	Maintenance, diagnostic, start-up and commissioning plant, real-time customer assistance
Connection mode	ALWAYS ON. Synchronous and active connection on all remote sites. Connection among different nteworks (i.e. 192.168.30.x, 192.168.40.x…) by VPN	ON DEMAND. P2P connection between PC-User and device/machine. On demand and aynchronous connection for differente sites.
VPN subnets communication	Yes, visible/accessible plants by all VPN clients	No
Subnets access	By local address	By local address
Multi-user management	No	YES
Network configuration	Different on different sites	Same on different sites (i.e. 192.168.20.x)
Supported SIM	All	All
Benefits	• Remote and synchronous access on different plants. • Field equipment remote query • Heterogeneous network integration	• Logistics maintenance and cost reduction • Machines remote control • User profiling

SINGLE LAN / TELECONTROL SCENARIO
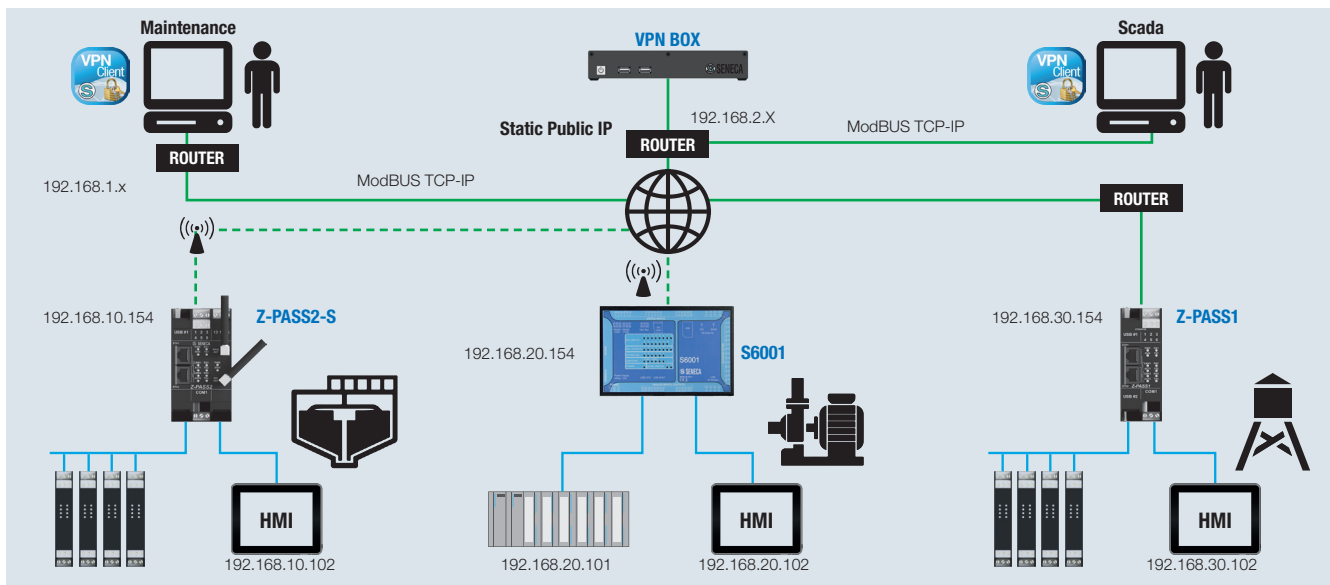
POINT-TO-POINT / REMOTE ASSISTANCE SCENARIO
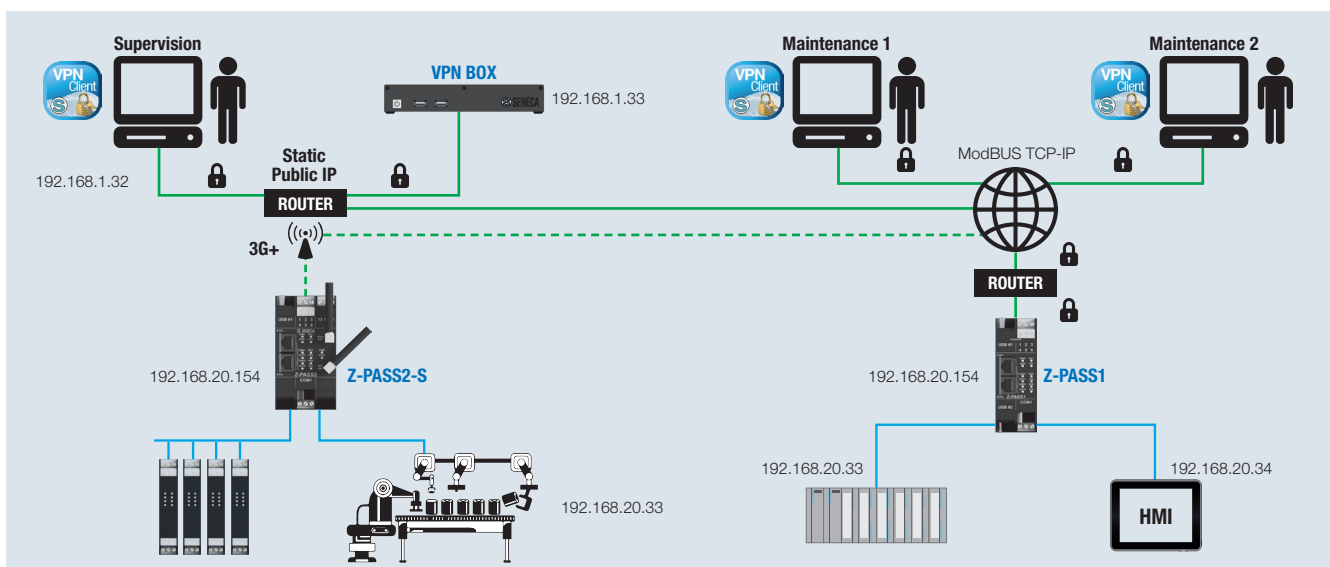
LET'S APPLICATION AREAS
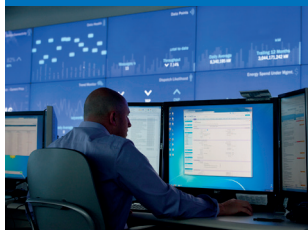
BUILDING AUTOMATION

- Datalogging, telemetry and alarm management
- HVAC system control
- Energy efficiency system control
- Infrastructure monitoring

ENVIRONMENT / WATER TREATMENT

- Water and environmental parameters monitoring via Ethernet, WLAN
- Data and alarms transmission

REMOTE MAINTENANCE / REMOTE CONTROL

- Remote Access to machine, plants, production lines
- VPN connections
- Point-To-Point or simultaneous connection to remote sites
- Local IP address remotely accessible
- Real-time customer support

INTEGRATION WITH IT SYSTEMS

- Remote access to enterprise networks
- Secure mobile access
- Modem , VPN and tunnel supported
- Certificate-based authentication

TRAFFIC AND TRANSPORT

- Environmental parameters measurement in order to manage the road network
- Infrastructure and road network traffic monitoring (Tunnels, Traffic lights, underpasses crossroads)
- Parking lots and train stations video surveillance

ENERGY

- Loads and high voltage switches remote control
- Measurement and monitoring of transfomer substations
- Reading of remote consumptions and remote meters
- Monitoring and networking of small energy production's plants

VIDEO SURVEILLANCE & SECURITY

- Transferring pictures and video from IP security cameras
- Video surveillance systems monitoring
- Secure connections with video surveillance systems

OIL & GAS

- Routing and redundancy of communication for applications in critical plants
- Information synchronization of mining and manufacturing plants Platforms, pipelines and tanks monitoring

ORDER CODES

Code	Description
GATEWAY / ROUTER	
Z-PASS1-0	VPN Industrial Gateway - Serial Device Server
Z-PASS2-A	VPN Industrial Gateway - Serial Device Server - 3G/Ethenet Router wiith RS485 serial interfaces
Z-PASS2-B	VPN Industrial Gateway - Serial Device Server - 3G/Ethenet Router with RS232/RS485 serial interfaces
VPN PLATFORM	
VPN BOX	VPN Server & Connectivity module for remote control and remote assistance
VPN BOX VM	VPN Server - Virtual Machine for remote control and remote assistance
VPN BOX MANAGER	Configuration software for VPN BOX, Server, sign-in credentials
VPN CC	VPN Client Communicator. Software tool for VPN network connection to install on client PCs
VPN CONTROLLERS	
Z-TWS4-L-0	IEC 61131 multifunction controller, Linux based, OEM version
Z-TWS4-L-K	IEC 61131 multifunction controller, Linux based, USB-SW-KEY
Z-TWS4-S-0	IEC 61131 multifunction controller, workbench Straton, OEM version

ORDER CODES

Code	Description
VPN CONTROLLERS	
Z-TWS4-S-K	IEC 61131 multifunction controller, workbench Straton, USB-SW-KEY
Z-TWS4-E-0	IEC 61131 advanced multi-function controlller, including energy protocols (IEC 60870-5-101, IEC 60870-5-104, IEC 61850) support, Straton workbench, OEM version
Z-TWS4-E-K	IEC 61131 advanced multi-function controlller, including energy protocols (IEC 60870-5-101, IEC 60870-5-104, IEC 61850) support, Straton workbench, CS-DB9M-MEF-PH cable, USB-SW-KEY
Z-PASS2-S-A	Remote Control Unit with built-in IO and 3G+ router, RS485 serial interfaces
Z-PASS2-S-B	Remote Control Unit with built-in IO and 3G+ router, RS232/RS485 serial interfaces
Z-PASS2-S-A-E	StratON Advanced Control Unit with built-in IO and 3G+ router, RS485 serial interfaces, including energy protocols (IEC 60870-5-101, IEC 60870-5-104, IEC 61850)
Z-PASS2-S-B-E	StratON Advanced Control Unit with built-in IO and 3G+ router, RS485 serial interfaces, including energy protocols (IEC 60870-5-101, IEC 60870-5-104, IEC 61850)
S6001-PC	Advanced Pump Controller with 7" HMI
S6001-RTU	Remote Control Unit with built-in IO and 3G+ modem
S6001-RTU-E	Remote Control Unit with built-in IO, 3G+ modem, Energy Management protocols

Further details on accessories, software and technical info please visit: **http://www.seneca.it/lets**

SENECA