

IoT CONNECTIVITY SOLUTIONS

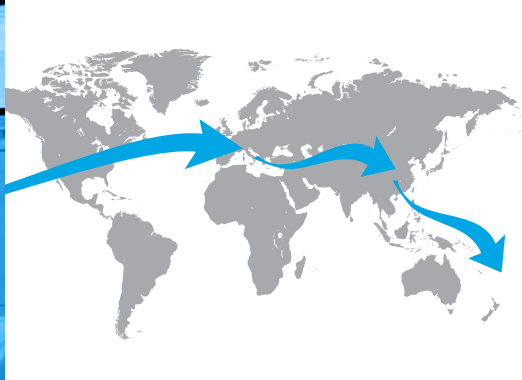


LET'S
I O T C O N N E C T I V I T Y
S O L U T I O N S

The logo for LET'S IoT Connectivity Solutions is presented within a blue square. At the top of the square is a white circular icon containing a stylized blue swirl. Below the icon, the word "LET'S" is written in large, bold, white, sans-serif capital letters. Underneath "LET'S", the words "I O T C O N N E C T I V I T Y" and "S O L U T I O N S" are stacked in smaller, white, spaced-out, sans-serif capital letters.

 **SENECA**
www.seneca.it

The Seneca logo consists of a stylized blue letter 'S' enclosed within a white circle with a thin black border. To the right of this icon, the word "SENECA" is written in large, bold, black, sans-serif capital letters. Below the company name, the website address "www.seneca.it" is written in a smaller, black, sans-serif font.



- **PREDICTIVE MAINTENANCE AND DIAGNOSTIC**
- **REMOTE ASSISTANCE**
- **REMOTE SOFTWARE UPDATE**
- **DATA AND PLANTS ACCESS IN "SINGLE LAN" AND "POINT-TO-POINT" MODE**

LET'S is the SENECA VPN - IoT platform that reduces maintenance costs for automation applications and machines and plants management, offering an integrated connectivity on 3 levels: data remote access, programmable control, network monitoring. Based on the VPN BOX Server module, LET'S allows "Always ON" connections (Telecontrol / Single LAN mode) for plant supervision or "On Demand" connections

(Remote Assistance / Poin-to-Point mode) to third-party machines and devices and for services maintenance or data storage. Communication from a PC or mobile device is via desktop software or APP VPN Client Communicator. The industrial VPN IoT gateway of LET'S platform extend the serial networks over Ethernet, as well as support complex architectures and safety critical applications. The Z- PASS2 model, with built-in

3G + / 4G LTE modem, also works as a router, DynDNS Server and a redundant communication device. One of the main innovations of the platform is the integration of the remote access functions with those of programmable automation thanks to the SENECA controllers based on IEC 61131 standard.

HIGHLIGHTS



Built-t-in programmable I/O



PLC and third party devices integration

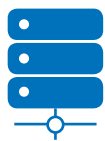


straton

PLC / SoftPLC IEC 61131 - Straton



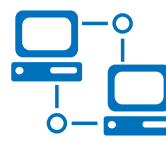
R/W Simatic PLC S7 Protocol



Server in House (HW/SW/Virtual Machine)



VPN based on OpenVPN standard



Single LAN / P2P (Telecontrol / Remote Assistance)



Mobile App for VPN client



Datalogging



Advanced alarm management

Modbus

Modbus support



Serial connections (RS232, RS485, custom)



3G+/4G connectivity



z Fast configuration through Web Server



100% Made & Designed In Italy



Industry 4.0 ready



SINGLE LAN / TELECONTROL CONNECTION

In Telecontrol / Single LAN mode (Always ON connection) VPN BOX works like a network server which is assigned a static public IP. Communication is simultaneous and always active between all remote sites and the server, as well with the different subnets that are part of the overall system. This kind of connection is ideal for real-time monitoring and implementation of supervision systems.

Typical application

Monitoring, maintenance, supervision, data acquisition, local automation, alarm management

Connection mode

ALWAYS ON. Synchronous and active connection on all remote sites. Connection among different networks (i.e. 192.168.30.x, 192.168.40.x...) by VPN

VPN subnet communications

Yes, visible/accessible plants by all VPN clients

Subnets access

By local address

Multi-user management

No

Network configuration

Different on different sites

Supported SIM

All

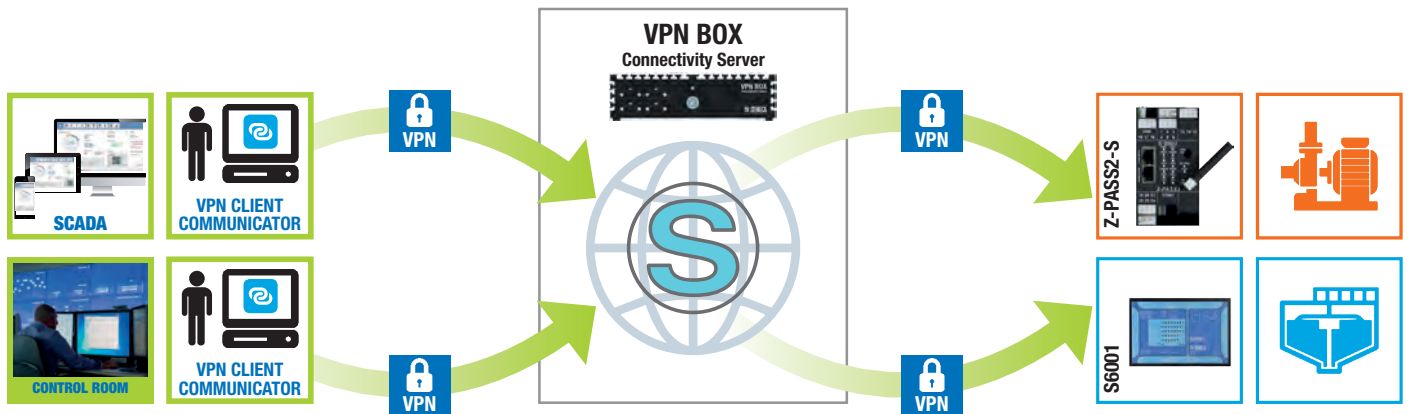
Benefits

- Remote and synchronous access on different plants.
- Field equipment remote query
- Heterogeneous network integration

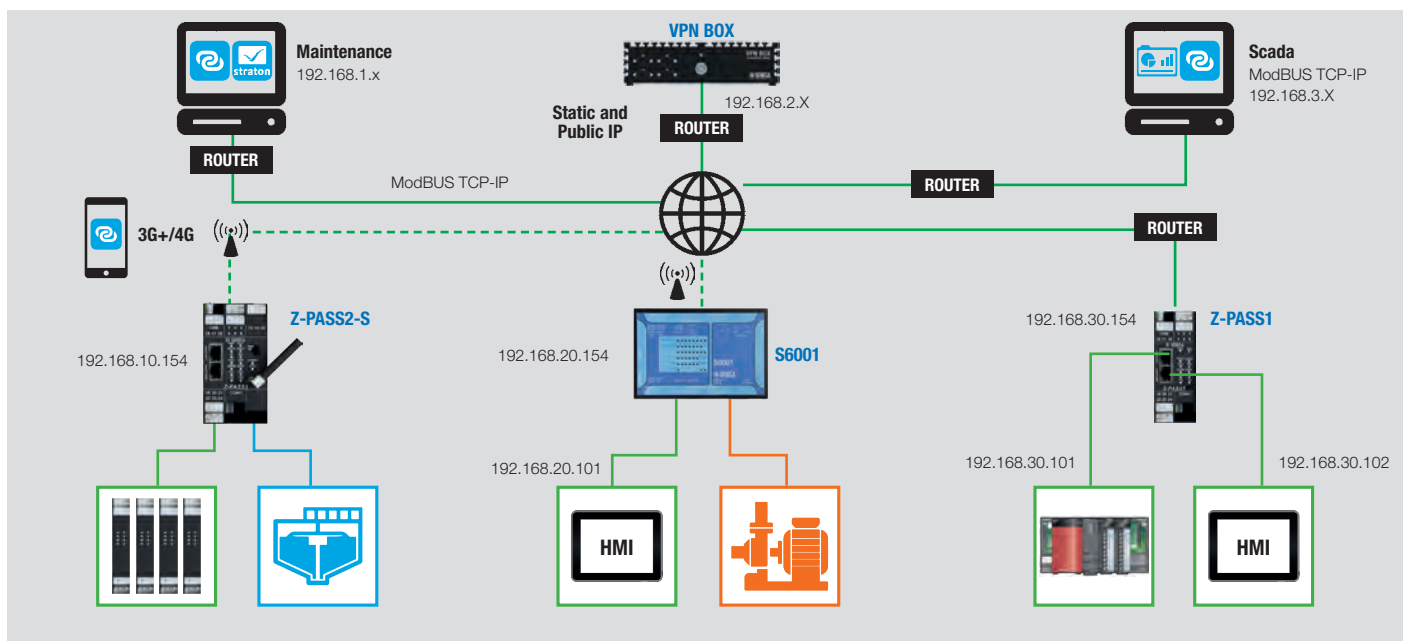


LOGIC MODEL

«ALWAYS ON» CONNECTION



SINGLE LAN / TELECONTROL SCENARIO





POINT-TO-POINT / REMOTE ASSISTANCE CONNECTION

In Remote Assistance / Point-To-Point mode (ON Demand connection) VPN BOX works as a concentrator and it provides a point-to-point communication between PCs (or device mobile) and machine / plant. It also requires the assignment of a static and public IP or possibly a DynDNS address. Ideal for maintenance and remote diagnostics applications, this type of connection allows the simultaneity of different users.

Typical application

Maintenance, diagnostic, start-up and commissioning plant, real-time customer assistance

Connection mode

ON Demand. P2P connection between PC-User and device/machine. On demand and asynchronous connection for different sites.

VPN subnet communications

No

Subnets access

By local address

Multi-user management

YES

Network configuration

Same on different sites (i.e. 192.168.20.x)

Supported SIM

All

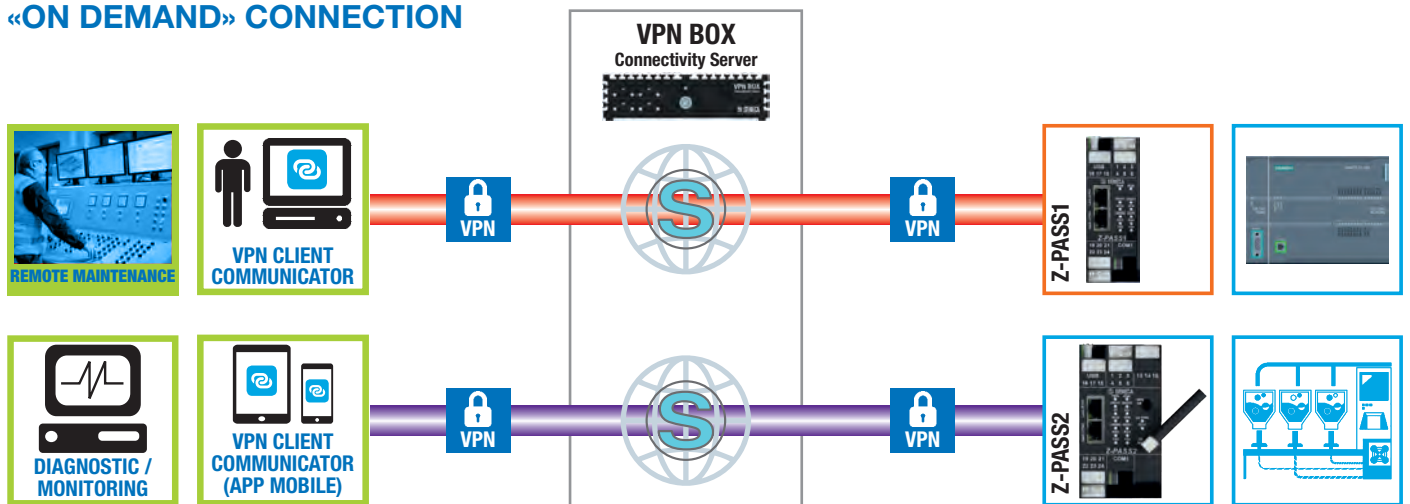
Benefits

- Logistics maintenance and cost reduction
- Machines remote control
- User profiling

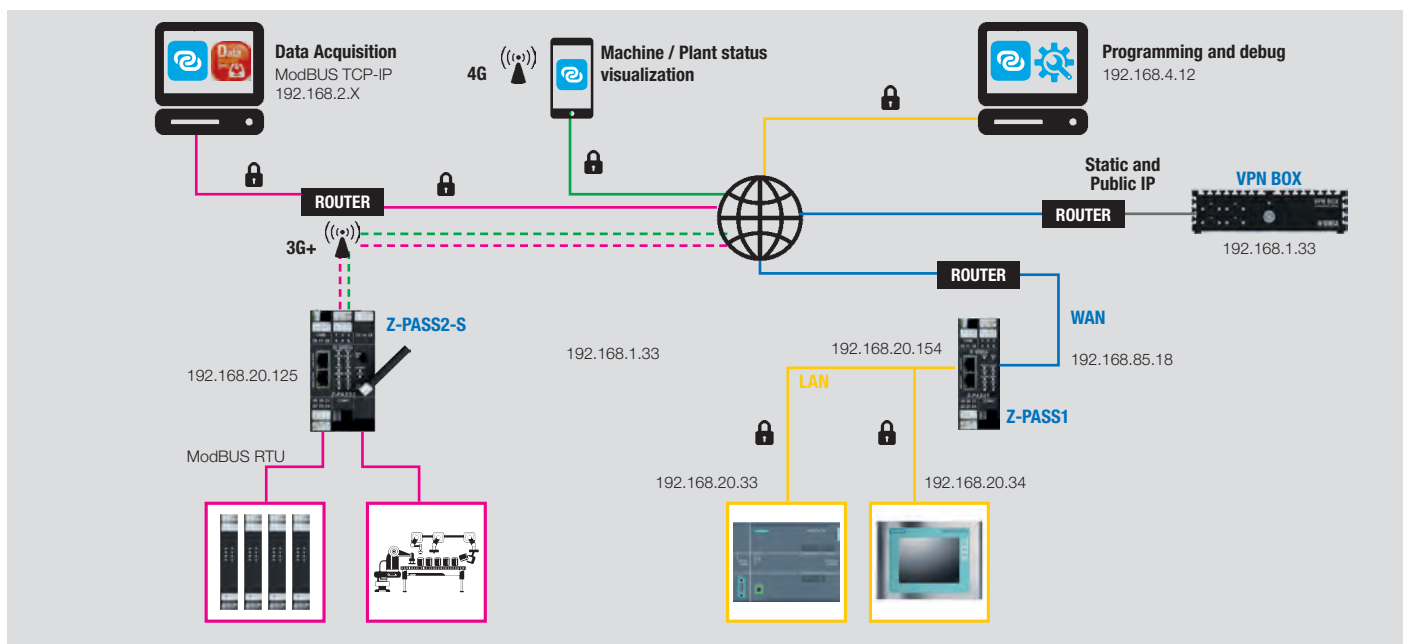


LOGIC MODEL

«ON DEMAND» CONNECTION



POINT-TO-POINT / REMOTE ASSISTANCE SCENARIO



PLATFORM

VPN SERVER / CONNECTIVITY MODULE



VPN BOX

Connection Management

- Server installed on customer's network with static public IP
- Remote Assistance / Point-to-Point and Telecontrol/ Single LAN remote connection modes
- Up to 496 supported devices in Single LAN mode, virtually unlimited in Point-To-Point mode

System Configuration

- VPN BOX registration client through certificates and password authentication
- Server Configuration with free specific software
- Enabling SSL/TSL security for remote access connections
- Update via USB Flash drive

Versions

- Device / Appliance HW
- Software / Virtual Machine

VPN CLIENT GATEWAYS / ROUTERS



Z-PASS1

Z-PASS2

FUNCTIONS	Z-PASS1	Z-PASS2
ModBUS Gateway (from Modbus TCP to Modbus RTU)	X	X
ModBUS Gateway Shared memory	X	X
ModBUS calling optimization	X	X
Serial communication diagnostic	X*	X*
Reverse Modbus Gateway (from Modbus RTU to Modbus TCP)	X*	X*
Client Modbus TCP (Gateway Shared Memory)	X*	X*
Remote / Virtual COM Port	X	X
Serial Tunnel Point-To-Point (TCP-UDP) / Point-To-Multi-Point (UDP)	X	X
3G+ / 4G Router (DHCP Server, Firewall, DynDNS)		X
Network Redundancy		X
Client OpenVPN Standard	X	X
Client VPN BOX for Always ON connection	X	X
Client VPN BOX for ON Demand connection	X	X
Built-in Web Server	X	X
Web pages security	Basic Authentication	Basic Authentication
Ethernet LAN/WAN	X	X
Ethernet SWITCH	X	X
Built-in I/O	4	6
Firmware/configuration update via USB	X	X
Remote connection block	X	X
Data Logging	X*	X*
Modbus IO/Tag management via SMS	X*	X*

X* *function available before Q2 2018

VPN CLIENT CONTROLLERS



Z-PASS2-S

Z-TWS4

S6001-RTU

S6001-PC

FUNCTION	Z-TWS4	Z-PASS2-S	S6001-RTU	S6001-PC
Modem / Router	-	3G+ / 4G	3G+	3G+
Ethernet ports	2	2	1	1
Serial ports	3	3	3	3
USB ports	1	1	1	1
Industrial protocols	ModBUS RTU/TCP-IP, CAN	ModBUS RTU/TCP-IP	ModBUS RTU/TCP-IP	ModBUS RTU/TCP-IP (only slave)
IT protocols	http, ftp, smtp	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 (opz.)	-
OpenVPN - VPN BOX support	x	x	x	x
VPN / Telecontrol - Single LAN	x	x	x	x
VPN / Remote Assistance - Point-To-Point	x	x	x	x
Built-in I/O	Nr.1 DI/DO (VPN connection) Nr.1 DI/DO (general use) Nr. 2DI/DO (programmable)	Nr.1 DI (VPN connection) Nr.1 DI (general use) Nr.1 DO (VPN connection) Nr.1 DO (general use) Nr.2 DI/DO (programmable)	Nr.15+2DI, Nr.8DO, Nr.4AI, Nr.2AO	Nr.15+2DI, Nr.8DO, Nr.4AI, Nr.2AO
Software	Straton, ZNET4	Straton, ZNET4	Straton, ZNET4	HMI
OEM Straton libraries	x	x	x	-

PROGRAMMING TOOLS



WEB SERVER

WEBSERVER

- Network, gateway, router configuration
- VPN Client configuration
- RTC configuration
- Firmware update



OPENVPN (App PC and Mobile)

- Client Open VPN flexible configuration
- Client authentication
- TUN, TAP interface support



VPN CLIENT COMMUNICATOR

VPN CLIENT COMMUNICATOR (App PC and Mobile)

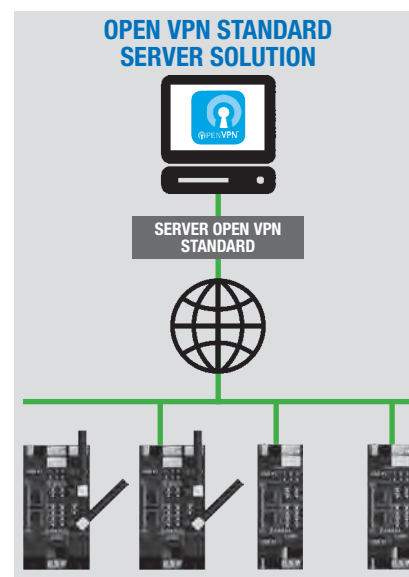
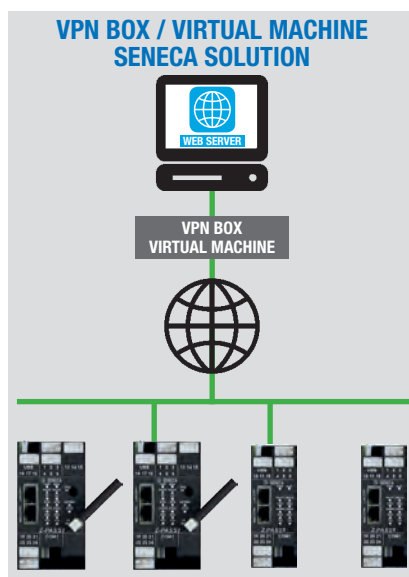
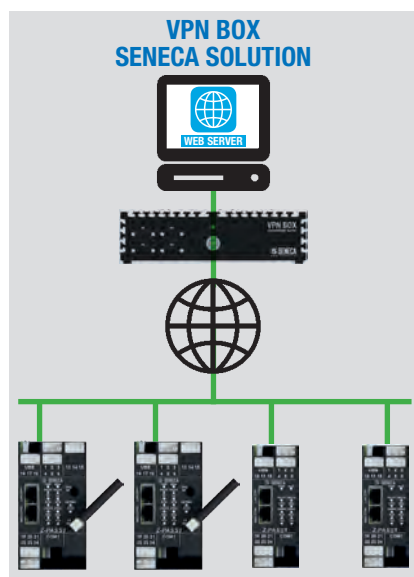
- P2P/SINGLE LAN connection mode
- Authentication credentials
- Certificates auto installation



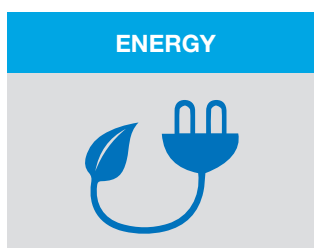
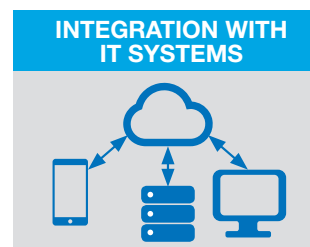
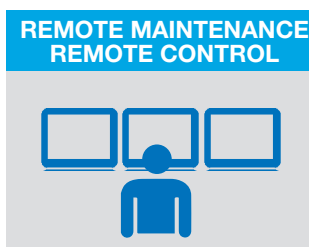
STRATON

- Control SoftPLC according to IEC 61131
- R/W functions by PlcSiemens with S7 Protocol

VPN SOLUTIONS



APPLICATION AREAS



ORDER CODES	
Code	Description
GATEWAY / ROUTER	
Z-PASS1-IO	VPN Industrial Gateway - Serial Device Server, 1DI, 2DO, 1DI/DO
Z-PASS2-IO	VPN Industrial Gateway - Serial Device Server, 2DI, 2DO, 2DI/DO, worldwide modem, 3G+/Ethernet Router, GPS
Z-PASS2-IO-4G-EU	VPN Industrial Gateway - Serial Device Server, 2DI, 2DO, 2DI/DO, 4G Ethernet Modem / Router, GPS
SERVER VPN	
VPN BOX	VPN Server for Point-to-Point / Single LAN connections
VPN BOX VM	VPN Server Virtual Machine for Point-to-Point / Single LAN connections
VPN BOX-D	VPN BOX Point-to-Point service, 30 day free trial up to 2 devices
VPN BOX VM-D	VPN Server Virtual Machine for Point-to-Point / Single LAN connections up to 2 devices
VPN CC	VPN Client Communicator, remote access software
VPN CC APP	VPN Client Communicator, mobile app
VPN MULTIFUNCTION CONTROLLERS	
Z-TWS4-L-IO	IEC 61131 multifunction controller, built-in I/O, Linux based, OEM version
Z-TWS4-S-IO	IEC 61131 multifunction controller, built-in I/O, workbench Straton, OEM version
Z-TWS4-E-IO	IEC 61131 multifunction controller, built-in I/O, workbench Straton, OEM version, energy protocols (IEC 60870-5-101, IEC 60870-5-104, IEC 61850)
Z-PASS2-S-IO	VPN Straton Remote Controller, 2DI, 2DO, 2DI/DO, worldwide modem, 3G+/Ethernet Router
Z-PASS2-S-IO-E	VPN Straton Remote Controller, 2DI, 2DO, 2DI/DO, worldwide modem, 3G+/Ethernet Router, GPS, energy protocols
Z-PASS2-SIO4GEU	VPN Straton Controller, 2DI, 2DO, 2DI/DO, modem 4G/Ethernet Router, GPS
Z-PASS2-SIOE4GEU	VPN Straton Controller, 2DI, 2DO, 2DI/DO, 4G Modem/Ethernet Router, GPS, energy protocols
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
S6001-PC	Controllore pompe con I/O integrato, sistema di programmazione Straton e HMI 7"
S6001-RTU	All-in-one RTU con I/O integrato, modem 3G e sistema di programmazione Straton
S6001-RTU-E	All-in-one RTU con I/O integrato, modem 3G e sistema di programmazione Straton, protocolli Energia

ORDER CODES	
Code	Description
SOFTWARE TOOLS	
SDD	SENECA Discovery Device, IP scanner
SESC	SENECA Ethernet to Serial Connection
STRATON-D-USB	Straton activation key for IEC 61131 controllers
STRATON-IDE256	Straton development environment, 256 tags, USB activation key
STRATON-IDE512	Straton development environment, 512 tags, USB activation key
STRATON-IDEUN	Straton development environment, unlimited tags, USB activation key
STRATON-870S	IEC 60870-5-101/104 Slave activation license
STRATON-870S-850	IEC 60870-5-101/104 Slave activation license+ IEC 61850 Client / Server
SSP	SENECA Straton Package - CPU Seneca Installer suite
STRATON-UPGRADE1	Straton upgrade from 256 to 512 tag
STRATON-UPGRADE2	Straton upgrade from 512 to unlimited tags
STRATON-UPGRADE3	Straton upgrade from 256 to unlimited tags
STRATON-WB	Straton workbench IEC 61131 free editor
Z-NET4	Configuratore sistemi I/O e controller Serie Z-PC, incluso ambiente di sviluppo Web Editor, Trend Viewer, Data Recorder
ACCESSORIES	
A-GPS-SMA	GPS antenna with SMA connector
A-GSM	Dual band swing GSM external antenna, cable 3.2 m, SMA
A-GSM-QUAD-N	4G/WIFI omnidirectional antenna, FME, L=3mt
MSD	Micro SD memory card with adapter
Z-PC-DINAL2-52.5	DIN rail bus system head terminal + 2 slots 52.5 mm
Z-PC-DIN1-35	DIN rail bus system head terminal + 1 slot 35 mm
Z-PC-DIN4-35	DIN rail bus system 4 slot 35 mm



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