

MULTIFUNCTION CONTROLLERS IEC 61131-3



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1.3

THE RANGE

The SENECA multifunction controllers (Z-TWS11, Z-TWS4, Z-PASS2-S, S6001-RTU) are modern modular / all-in-one devices with high connectivity. They combine PLC tasks based on the Straton IEC 61131-3 softPLC platform with web server functionality, datalogger, remote control, remote assistance and energy management (in compliance with the IEC 60870-101/104, IEC 61850 protocols). The controllers can be used with different architectures and configurations depending on the complexity of the system and on the required hardware requirements.

Z-TWS11



ENTRY
LEVEL

Z-TWS4



MULTIFUNCTION

Z-PASS2-S



REMOTE
CONTROL

S6001-RTU



ALL-IN-ONE

Modular automation solution capable of managing 100 tags for universal applications. With its high connectivity thanks to the FTP client, SMTP client, http, TCP ModBUS, ModBUS RTU protocols, the controller also has 2 analog inputs at 16 bit configurable in voltage or current and can create automation systems that can be expanded with ModBUS / Ethernet I/O modules of the Z-PC Lines.

Z-TWS4 is an advanced control system with 4 built-in I/O, 1 CAN port, 4 serial ports, 2 USB ports, double Ethernet port. Designed for system automations (Straton - Soft PLC IEC 61131-3) and Energy Management applications (thanks to the IEC 60870-5-101, IEC 60870-5-104, IEC 61850 protocols), Z-TWS4 is also a Linux CPU -based designed for data acquisition and control applications.

Z-PASS2-S is a high performance controller with 6 integrated digital I/O able to combine PLC functions with routing and remote access functions. It is in fact based on Straton soft-PLC with integrated web server, VPN and 4G LTE modem / router with GPS / Glonass functions. Z-PASS2-S can support Point-To-Point Remote Assistance or Single LAN Remote Control connections.

S6001-RTU is a compact all-in-one unit with 31 I/O channels and 1 4G LTE modem on board. Thanks to the extended connectivity (4G / LTE, Ethernet, ModBUS RTU / TCP, Serial) it can be expanded and interfaced with other systems and allows communications to and from central units and remote monitoring of the systems. S6001-RTU can also be used as a stand-alone system controller.

MULTIFUNCTIONALITY



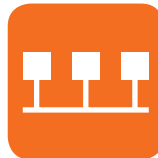
Multipurpose Controllers
(SoftPLC,
remote controllers,
gateway, datalogger)



Soft PLC
IEC 61131-3



Technological
function
libraries
ready to use



Fieldbus (ModBUS
RTU/CTP-IP,
M-BUS, S7
Protocol)



IEC 61850
IEC 60870-5-101/104
Energy Protocols



Integration
with HMI



Integration with
communication
interfaces



Universal
application
areas



Datalogger
Functionality



Advanced
Alarm System



IT Protocols
(HTTP/HTTPS,
FTP/FTPS, SMTP,
SNMP)



Data interchange
with standard
OPC UA/DA



Integration with
radio modules



Integration
with IO modules
(on board and
outdoors up to 1,000
points)



Industrial
strength



SCADA opening and
DAQ systems



Advanced technical
support



IIoT Protocols
(MQTT, http post)



Cloud platforms
support



Integration with
energy meter



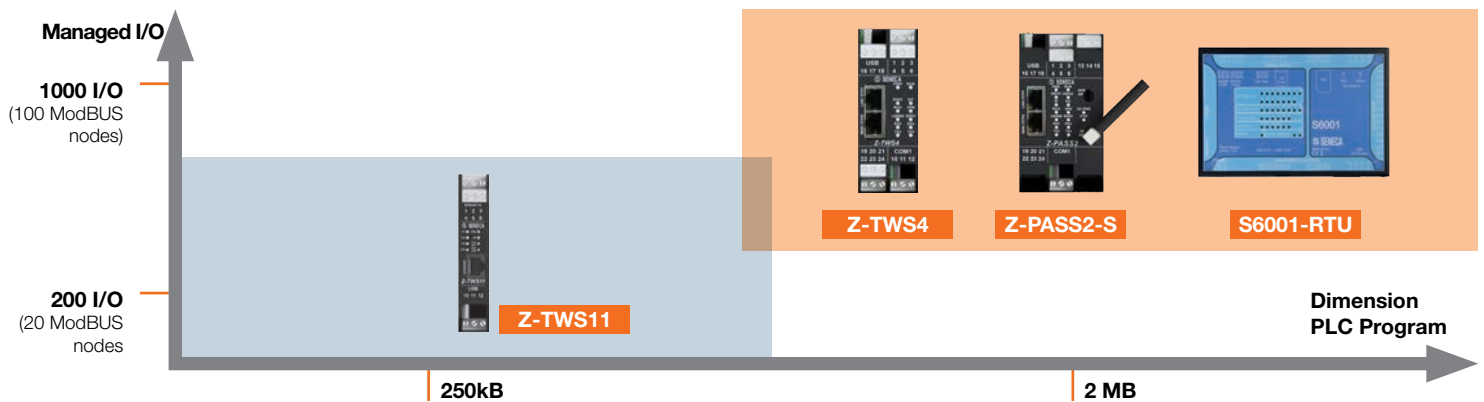
Integration with
electro-pneumatic
of third parties

CONNECTIVITY

INTEGRATION

SELECTION GUIDE

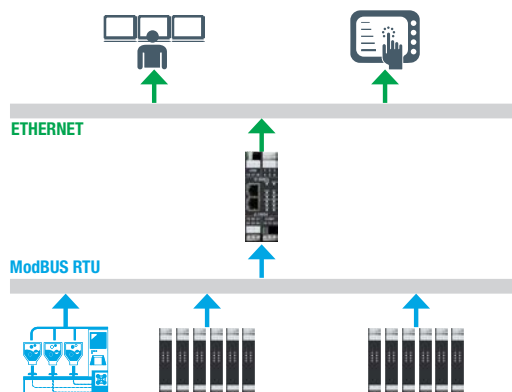
	Z-TWS11	Z-TWS4	2-S	S6001-RTU
SoftPLC	X	X	X	X
Energy Controller		X	X	X
Datalogger	X	X	X	X
Gateway	X	X	X	X
LAN Router	-	X	X	X
4G/LTE/GPS Router	-	-	X	X
Remote assistance unit		X (with external modem/router)	X	X
Remote control unit		X (with external modem/router)	X	X
LAN/WAN Switch			X	X



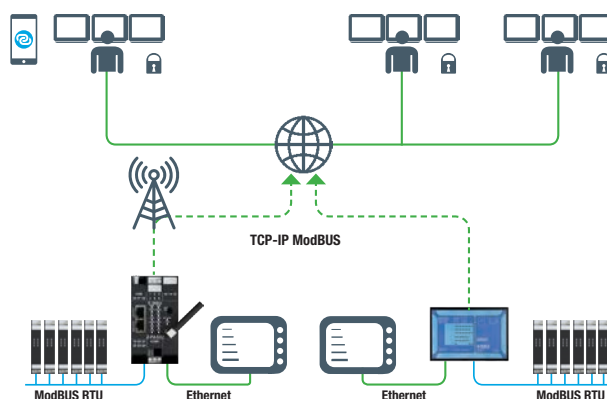
	Z-TWS11	Z-TWS4	Z-PASS2-S	S6001-RTU
HARDWARE / INTERFACES				
Fast Ethernet Ports	1	2	2	1
Serial Ports	2	3	3	3
USB Ports	1	1	1	1
Built-in I/O	2 AI	1 DI, 2 DO, 1 DI/DO	2 DI, 2 DO, 1 DI/DO	15+2DI, 4AI, 8DO, 3AO
Modem Router	-	-	4G/LTE	4G/LTE
PROGRAMMING AND SOFTWARE				
Configuration Environment	Z-NET4	Z-NET4	Z-NET4	Z-NET4
PLC Programming	IEC 61131-3, Straton	IEC 61131-3, Straton	IEC 61131-3, Straton	IEC 61131-3, Straton
Remote Control Libraries	-	Yes	Yes	Yes
Max N° Variables / Tags	200	1000	1000	1000
Program dimension	250kB	2048kB	2048kB	2048kB
Diagnostics	-	Web Server	Web Server	Web Server
Data Recording and Display	Data Recorder, Trend Viewer, Web Factory	Data Recorder, Trend Viewer, Web Factory	Data Recorder, Trend Viewer, Web Factory	Data Recorder, Trend Viewer, Web Factory
CONNECTIVITY				
IT Protocols	HTTP, FTP, SMTP, SNMP, SAMBA	FTP / SFTP Server HTTP / HTTPS Server SMTP / SMTPS Client / SNMP / SAMBA	FTP / SFTP Server HTTP / HTTPS Server SMTP / SMTPS Client / SNMP / SAMBA	FTP / SFTP Server HTTP / HTTPS Server SMTP / SMTPS Client / SNMP / SAMBA
Safety Protocols	-	Open VPN, SSL/TLS	Open VPN, SSL/TLS	Open VPN, SSL/TLS
Fieldbus	ModBUS RTU, TCP-IP ModBUS	ModBUS RTU, TCP-IP ModBUS, S7 Protocol, M-BUS (with Z-MBUS accessory)	ModBUS RTU, TCP-IP ModBUS, S7 Protocol, M-BUS (with Z-MBUS accessory)	ModBUS RTU, TCP-IP ModBUS, S7 Protocol
IoT Protocols	-	OPC UA/DA Client / Server, MQTT	OPC UA/DA Client / Server, MQTT	OPC UA/DA Client / Server, MQTT
Energy Protocols	-	IEC 60870-101 Slave IEC 60870-104 Master / Slave IEC 61850 Client / Server	IEC 60870-101 Slave IEC 60870-104 Master / Slave IEC 61850 Client / Server	IEC 60870-101 Slave IEC 60870-104 Master / Slave IEC 61850 Client / Server
Cloud Support	-	Yes	Yes	Yes
VPN support	-	Yes	Yes	Yes

APPLICATION DIAGRAMS

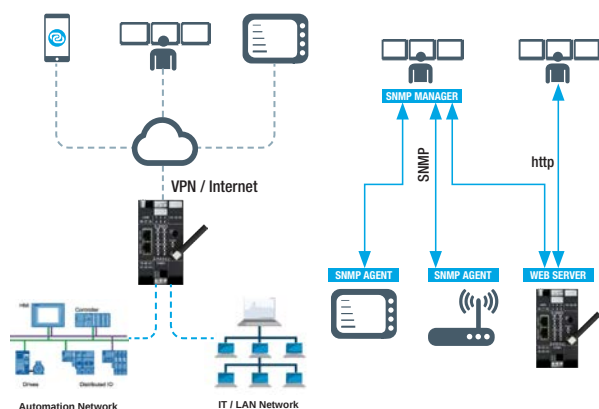
DISTRIBUTED AUTOMATION



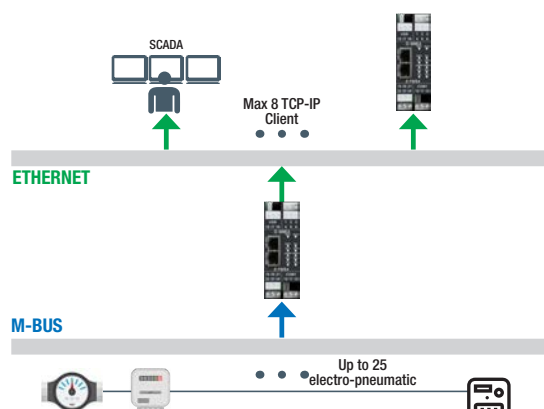
REMOTE CONTROL / REMOTE ASSISTANCE



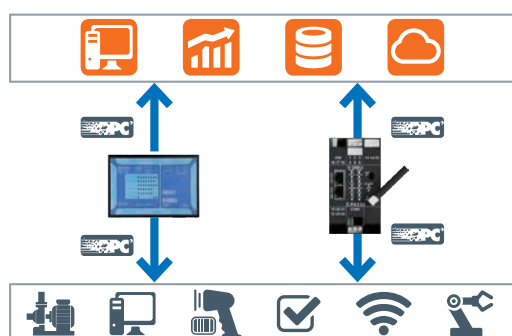
NETWORKING



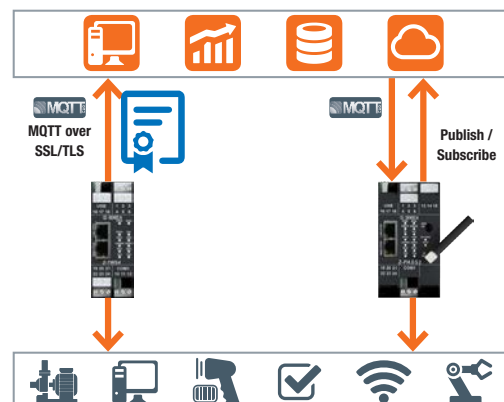
SMART METERING



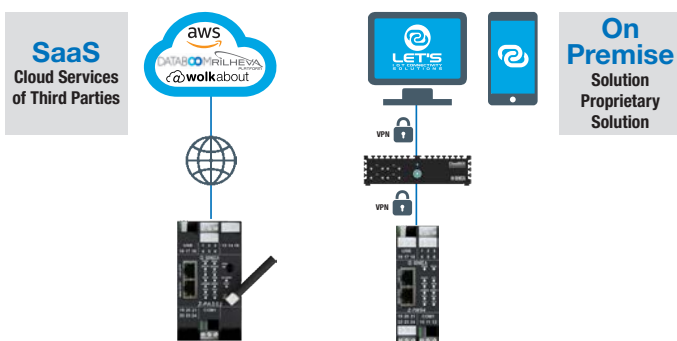
CONTROL WITH OPC UA/DA



CONTROL WITH MQTT



CLOUD INTEGRATION



PASS THROUGH MODBUS

