



Z-TWS11

IEC 61131 MULTIFUNCTION CONTROLLER WITH BUILT-IN I/O

Highlights

- **Entry level automation solution (~ 100 tags) for universal applications**
- **High connectivity with FTP client, SMTP client, http, MODBUS TCP, MODBUS RTU protocols**
- **Ethernet, RS485, RS232 / RS485 and MicroUSB communication ports**
- **N. 2 built-in Analog Inputs**
- **Expandability with MODBUS I/O modules and devices**
- **Data memory with microSD card slot expandable up to 32GB**
- **Programming system based on and Z-NET4 and IEC 61131-1 Straton softPLC**
- **Web Server configuration**
- **Easy installation and wiring by bus housed in DIN rail (IEC EN 60715)**

Z-TWS11 is a multifunction and multi-protocol programmable control unit based on IEC 61131-1 SoftPLC Straton workbench.

The controller also includes n. 2 16-bit analog inputs configurable voltage or current and can be the platform to realize automation systems with expandable ModBUS / Ethernet I/O modules MODBUS.

Z-TWS11 high-level connectivity is granted by n.1 RJ45 10/100 Mbps Ethernet port, n.1 RS485 port, n.1 RS232 / RS485 port, n.1 microUSB port.

The unit supports FTP client, SMTP client, http, MODBUS TCP, MODBUS RTU communication protocols. Z-TWS11 make possibile configuration and firmware upgrading by Web Server.

Beside 120 MHz ARM 32-bit processor and real-time multitasking operating system, the modular controller Z-TWS11 contains a micro SD card slot up to 32 GB of storage for every need.

Electrically Z-TWS11 ensures a level of isolation 1,500 Vac between power supply and other circuits.





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TECHNICAL DATA

GENERAL DATA

Power Supply	10..40 Vdc; 19..28 Vac
Isolation	1.500 V
LED status indicators	Power Supply Serial communication Ethernet SD card
Protection degree	IP20
Operating temperature	-10..+50°C
Dimension (wxhxd)	100 x 17.5 x 112 mm
Case	Nylon 6, 30% fiberglass filled self extinguishing class V0
Connection	Removable terminals with section of 2.5 mm ²
Mouting	35 mm DIN rail (IEC EN 60715)

COMUNICAZIONE

Ethernet	Nr.1 Ethernet Port 10/100 Mbps (RJ45)
Serial Ports	Nr 1 RS232 / RS485 switchable Nr. 1 RS485
USB	Nr 1 micro USB on side connector
Industrial protocols	ModBUS TCP-IP, ModBUS RTU, custom protocols
IT protocols	FTP client, SMTP client, http, ModBUS TCP, ModBUS RTU

INPUT DATA

Channels / Type	Nr 2 Analog Input @16 bit configurable mA/V
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PROCESSOR / MEMORY

Processor	ARM 120 MHz, 32 bit
RAM / FeRAM	256 MB / 256 byte
Slot Micro SD	SD Card up to 32 GB

CONFIGURATOR / NOMRS

System software	Z-NET4 / Straton
Web Server	Yes
PLC programming	IEC 61131 (Straton) with custom libraries
Marking	CE
Norms	EN 61000-6-4, EN 61000-6-2

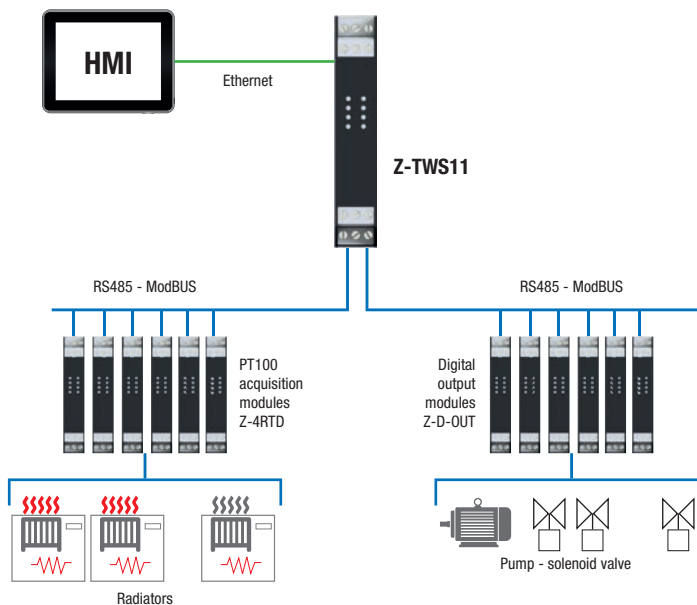
SENECA IEC 61131 CONTROLLERS

SENECA IEC 61131 controllers are industrial CPUs that combine the powerful programming environment based on SoftPLC Straton with VPN, web servers, data loggers, data acquisition and remote control functions. IEC 61131 controllers support distributed architectures (RS485), open protocols (HTTP, FTP, Modbus TCP client and server) and integration with other platforms.

Z-TWS11 	Z-TWS4 	Z-MINIRTU 
Z-PASS2-S 	Z-TWS5 	S6001-RTU 

APPLICATION NOTE

TEMPERATURE REGULATION SYSTEM WITH HYSTERESIS LOOP



ORDER CODES

Code	Description
Z-TWS11	IEC 61131 multifunction controller with built-in I/O

SOFTWARE

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-SP	Straton SENECA Package - CPU Seneca Installer suite
STRATON-WB	Straton workbench IEC 61131 free editor
Z-NET4	Automation system configurator, Web Editor included

ACCESSORIES

MSD	Micro SD memory card with adapter
Z-PC-DIN2-17.5	DIN rail bus system 2 slots 17.5 mm
Z-PC-DINAL2-17.5	DIN rail bus system head terminal + 2 slots 17.5 mm
Z-POWER-115-15VA	19 Vac transformer, 115 / 15 VA
Z-POWER-230-15VA	19 Vac transformer, 230 / 15 VA
Z-POWER-230-25VA	19 Vac transformer, 230 / 25 VA
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5A

CABLES

CE-RJ45-RJ45-C	Crossover Ethernet cable (RJ45-RJ45)
CE-RJ45-RJ45-R	Straight-thru Ethernet cable (RJ45-RJ45)
CS-DB9F-CLAMP	RS485 connection cable (DB9F-Clamps)
CS-DB9F-TIP-V	RS485 serial connection cable (DB9F - tips)
CS-DB9M-TIP-V	RS485 serial connection cable (DB9M - tips)
CU-A-MICROB	USB-A Micro USB-B 5 P plug cable