

Z-TWS5

IEC 61131 CODESYS / WINDOWS CE MULTIFUNCTION CONTROLLER

Highlights

- **IEC 61131-3 SoftPLC based on CODESYS 2.3 platform**
- **CPU ARM Cortex A8 600 MHz**
- **High Connection Density: Nr.2 Ethernet ports, Nr.3 RS485 ports, Nr.1 RS232 port, Nr.1 USB OTG port, Nr. 1 USB type A port**
- **Modbus RTU/TCP, CAN, VPN support**
- **Real Time Clock with backup battery • 1.500 Vac isolation between power supply and other low voltage circuits**
- **RTU / Gateway built-in functions**
- **Virtual network connection and point-to-point tunnelling**
- **Configurable as web server and TCP-IP node**
- **SCADA / Web-based platforms compatibility**

Z-TWS5 is a powerful controller based on ARM Cortex A8 600 MHz, designed for automatic machines and industrial plants, programmable with SoftPLC Codesys - IEC 61131-3 standard.

Z-TWS5 is a multifunction PLC, data logger and web server. With RAM DDR2 256 MB, Flash 128 MB and slot for microSD card up to 32 GB, Z-TWS5 is a controller with nr.2 10/100 MB Fast Ethernet ports including switch hub, nr.1 CAN port, nr.3 RS485 ports, nr.1 RS232 port, nr.2 USB ports (OTG and Host).

The available communication protocols are Modbus RTU, ModBus TCP-IP and CANopen.

Z-TWS5 allows the connection with an external HMI by the serial or Ethernet port. It also enables connecting SCADA via OPC technology and supports VPNs using OpenVPN. Z-TWS5 ensures easy wiring for power and serial communication through backplane bus mounted in the DIN EN IEC 60715 rail.



Z-TWS5



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TECHNICAL DATA

GENERAL DATA

Power Supply	10..40 Vdc; 19..28 Vac
Consumption	4W@24V (typical); 6W (max)
Isolation	1.500 V
LED status indicators	Power Supply Serial Communication Ethernet PLC Status Connection on Operating System on
Protection Degree	IP20
RTC	Yes with backup battery
Operating temperature	0..+55°C
Dimension	100 x 35 x 112 mm
Case	Nylon loaded PA6 with fiber glass at 30%, V0 self extinguish class
Connection	Removable 3 way screw terminals, 5.08 pitch Rear IDC10 connector for DIN 46277 rail Removable 4 pin connector, two RJ45 connectors, USB and micro USB connectors Plug in: micro SD card
Mounting	35 mm mounting rail (IEC EN 60715)

COMMUNICATION

Ethernet	Nr 2 Fast Ethernet 10/100 Mbps ports (RJ45, built-in hub switch)
Serial	Nr 1 RS232 / RS485 commutable port Nr 1 RS485 (IDC10) Nr 2 RS485 (terminals)
USB	Nr 1 USB type A side connector Nr 1 micro USB OTG side connector
CAN	Nr 1 CANopen bus port (COMO, IDC10, terminals 1,2,3)
Industrial protocols	ModBUS TCP-IP, ModBUS RTU, CANopen, custom
IT protocols	PPP, HTTP, FTP, SMTP
VPN Support	VPN Box, OpenVPN

PROCESSOR / MEMORY

CPU	ARM Cortex A8 - 600 MHz
O.S.	Win CE
Flash Memory (data)	128 MB
FeRAM	64 kB
RAM	256 MB DDR2
Slot Micro SD	Yes for micro SD Card up to 32 GB

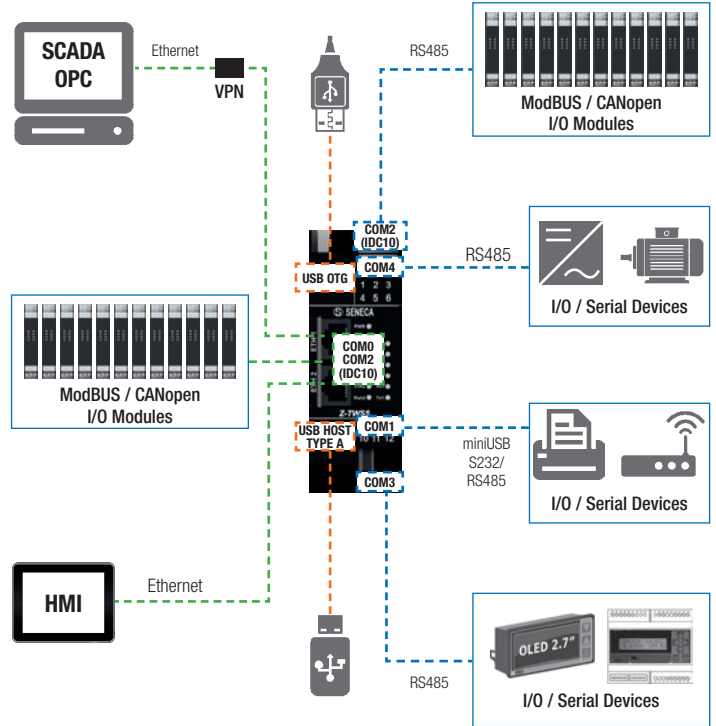
SETTING

System Software	Z-NET4 / CODESYS
DIP switches	Yes (RS485 / CANopen)
Web Editor	Yes
Web Configurator	Yes
Datalogger	Yes
PLC programming	IEC 61131 CODESYS
SENECA Function Blocks	PPPconnect, FTPget, FTPsend, GETsms, SENDmail, SENDsms

STANDARD

Approval	CE
Norms	EN 61000-6-4, EN 61000-6-2, EN 61010

CONNECTIONS



ORDER CODES

Order code	Description
Z-TWS5	IEC 61131 multifunction controller with CODESYS programming system

ACCESSORIES

Z-PC-DINAL1-35	DIN rail support with screw terminals 1 slot pitch=35 mm
Z-PC-DIN1-35	DIN rail support: 1 slot for rear connector pitch=35 mm
Z-PC-DIN4-35	DIN rail support: 4 slot for rear connector pitch=35 mm
CS-DB9M-MICROB	Communication serial cable RS232 miniB 4 Pins
CS-TIP-MICROB	Communication serial cable RS485 miniB 4 Pins
Z-SUPPLY	Single-phase switching power supply 24V @ 1.5A
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

SOFTWARE

Z-NET4	Z-PC system configurator, Web Editor included
CODESYS	IEC 61131 CODESYS v.2.3 environment for Z-TWS5 programming SENECA CODESYS PACKAGE (CODESYS 2.3.9.22, JMobile 2.0.0.324, Windows CE Remote Host 3.00, Z-NET4 1.31, OPC Server IO 2.07, CODESYS Seneca Library 1.1.0 e 2.0.0)
SCP	
OPC-SERVER-IO-1	Software OPC Server I/O 100 tag
OPC-SERVER-IO-2	Software OPC Server I/O 500 tag
OPC-SERVER-IO-3	Software OPC Server I/O tag illimitati
OPC-SERVER-MB-1	Software OPC Server ModBUS Slave 100 tag
OPC-SERVER-MB-2	Software OPC Server ModBUS Slave 500 tag
OPC-SERVER-MB-3	Software OPC Server ModBUS Slave tag illimitati



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