

- Mult-function modular CPU's
- Ethernet port 10Base T open to SCADA
- Master/Slave ModBUS on RS232/RS485
- RISC/MISC Processor 32 or 64 bit
- 8 MB RAM, 16 MB Flash Memory
- Configuration and Setup Software IEC 61131
- Flexible Power (10-40 Vdc or 19-28 Vac)
- DIN Rail Mount (TS 35)
- Removable Terminal Blocks



The Z-NET™ Series offers flexible, cost effective solutions to industry's increasingly diverse applications including distributed control, data acquisition, SCADA & telemetry. An ideal solution for process control and management using distributed I/O on plant and machinery. The I/O modules can be widely distributed or grouped together and accept all standard field signals. Modbus RTU protocol guarantees universal connectivity so applications are limitless: data acquisition, automation, telemetry control, etc.

The Z-NET Modular Control Units feature "soft PLC" capability, web server functionality, bridge TCP/IP, 32 bit processor, 16MB flash and 8 MB RAM. The range of modules available covers all the usual signal input and output requirements for simple SCADA and Data Acquisition applications. The Z-NET Modular Control Units include:

Z-TWS-02	A 32 bit multi-function control unit, PLC, RTU and Web Server.
Z-TWS-64	A 64 bit multi-function control unit, PLC, RTU and Web Server.
Z-LWS	A micro PLC unit for local automation.
Z-BRIDGE	A serial protocol converter/bridge from ModBUS RTU to ModBUS TCP/IP

The Z-NET Modular Control Units are the foundation of the Z-NET Series products. More flexibility from ioSelect.

### General Specifications - Common

Ethernet Speed	10 Mbps
Power Supply	10 to 40 Vdc 19 to 28 Vac 50/60 Hz
Power Consumption	3.5 W max
Isolation	1500 Vac, 3-way
Status Indicators	Power, PLC, Ethernet Link, Ethernet Connection
Operating Temperature	0 to 55 °C
Storage Temperature	20 to 70 °C
Humidity	30 to 90 % @ 40 °C
Dimensions	17.5 x 100 x 112 mm (0.69 x 3.94 x 4.41 in)
Weight	250 g (8.8 oz)

### Communications Specifications

Ports	Z-: TWS-02	TWS-64	LWS	BRIDGE
#0: RS232	1	1	1	1
#1 RS485 (Modbus Master)	1	1	1	1
#2 RS232/RS485 (DIP Sw) (Programming)	1	1	0	0
#3 RS485 (I/O acq)	1	1	1	1
Ethernet 10Base-T	1	1	1	1
<b>Protocols</b>				
Modbus RTU	1	1	1	1
PPP	1	1	1	1
http	1	1	1	1
FTP	1	1	download only	
SMTP	1	1	0	0
Modbus Z-BRIDGE/IP		1	1	1

<b>Ordering Information:</b>	<b>IOS-ZNET-Z-TWS-02</b> <b>IOS-ZNET-Z-TWS-64</b> <b>IOS-ZNET-Z-LWS</b> <b>IOS-ZNET-Z-BRIDGE</b>	32-bit PLC/RTU Module with Ethernet Gateway & Web Server 64-bit PLC/RTU Module with Ethernet Gateway & Web Server 32-bit PLC Module with Ethernet Gateway Modbus RTU to Modbus TCP/IP Bridge
<b>Accessories:</b>	<b>IOS-ZNET-DINAL</b> <b>IOS-ZNET-DIN2</b> <b>IOS-ZNET-DIN4</b> <b>IOS-ZNET-DIN8</b>	Din Rail Power and Comms Connector Din Rail Power and Comms Connector for 2 modules Din Rail Power and Comms Connector for 4 modules Din Rail Power and Comms Connector for 8 modules

### Communications Specifications

Ethernet Communication	TWS-02	TWS-64	LWS	BRIDGE
Ethernet 10 Base T	1	1	1	1
Ethernet TCP/IP	1	1	0	0
Modbus TCP/IP	Client/Server	Client/Server	Client/Server	Server

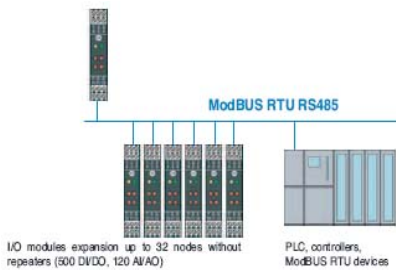
  

Serial/Bus Communication	TWS-02	TWS-64	LWS	BRIDGE
Modbus Master (max tasks)	4	4	4	4
Modbus Slave (max tasks)	3	3	3	3
Modbus RTU	Master/Slave	Master/Slave	Master/Slave	Master
Data Rate(bps)	1200 to 115,200			
Parity	None, even or odd			
Max Distance	1200 m / 4000 ft			
Max # of nodes	32			

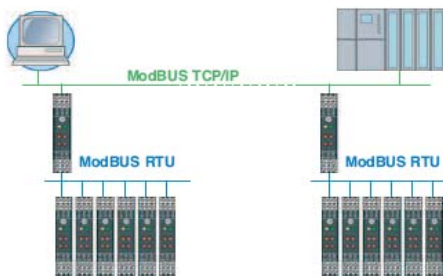
### Processor & Memory

	Z-TWS-02	Z-TWS-64	Z-LWS	Z-BRIDGE
Cycle time	2.5 ms per 1000 instructions	N/A	N/A	N/A
Processor	CPU $\mu$ P RISC 32 bit-20 MIPS	CPU $\mu$ P MISC 64 bit	CPU $\mu$ P RISC 32 bit-20 MIPS	CPU $\mu$ P RISC 32 bit-20 MIPS
Flash Memory	16 MB	16 MB	512 kB	512 kB
RAM	8 MB	8 MB	256 kB	256 kB
Battery Backup	236 bytes			

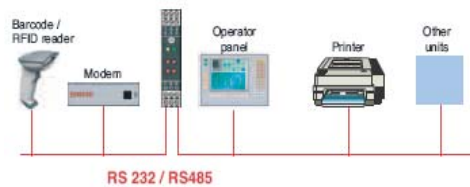
### RS-485 - Modbus RTU



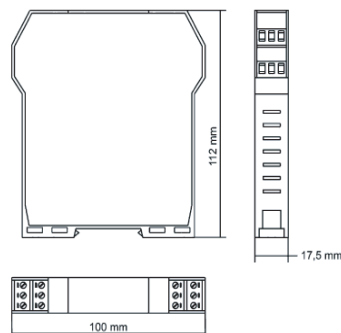
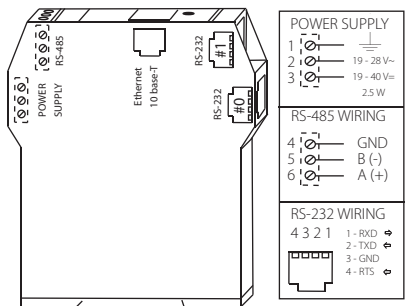
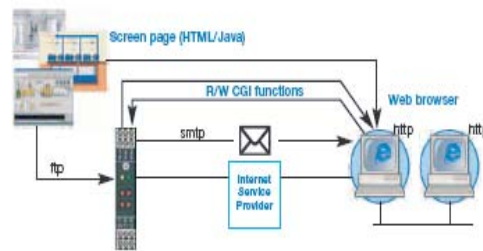
### Bridge Modbus RTU/Modbus TCP-IP



### RS-232/RS-485 Serial Connection



### Remote Access, Web and Point to Point Protocol Functions



EN50081-2  
EN50082-2  
EN5014/141  
EN55011  
EN60742  
EN61000-2-2/4  
EN61010-1

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