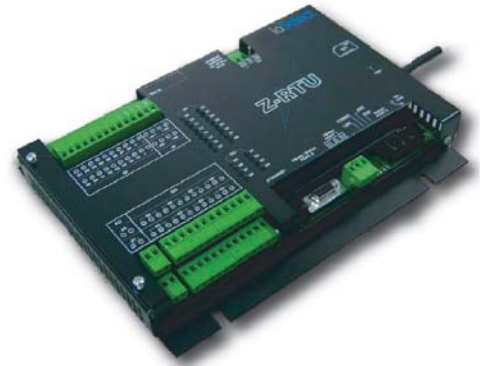


- On-Board Isolated I/O
 - ZRTU1 = 16 DI, 8 DO, 4 AI & 2 AO
 - ZRTU2 = 8 DI, 4 DO, 2 AI & 1 AO
- IO Expansion with ZNET Modules
- 3 Serial Communication Ports + 1 Ethernet 10Base-T
- Modem GSM/GPRS dual band or PSTN as Option
- 3-Way Isolation
 - 1500 Vac Isolation Input, Output & Power
- DC Power (10-30 Vdc)
- Removable Terminal Blocks



Z-RTU is a simple to use and install, versatile device for remote control, datalogging and I/O management packed in a small and strong aluminium case. The Z-RTU offers excellent math capabilities (CPU μ P RISC 32 bit – 20 MIPS) and memory (16 MB Flash, 8 MB RAM, 236 bytes retentive memory). The Z-RTU base version has 8 digital input and 4 digital output channels, 2 analog input and 1 analog output channels. The I/O density may be doubled through the optional expansion board. It may be further expanded using ZNET modules. The base configuration contains the following I/O channels with each “group” galvanically isolated: 8 digital inputs (with internal or external power supply), 2 analog inputs (voltage/current, 14 bit resolution, selectable loop power supply), 4 digital outputs (SPDT relay), individually isolated, 1 analog output (voltage/current).

Through the software it is possible to view the main power supply voltage in tenths of volts. Z-RTU may have an industrial dual band GSM modem for remote connections, (alternatively, a PSTN modem may be installed) to allow the remote management of alarms, diagnostics and automatic data transmission. Z-RTU is the ideal solution for environmental monitoring applications, water and drainage system monitoring, gas control and energy management. Ideal solutions made easy from ioSelect.

General Specifications

Power Supply	10-30 Vdc
Power Consumption	7 W min, 15 W max
Status Indicators	Digital I/O Status Power Supply Ethernet Link Modem Status Error
Operating Temperature	-10 to 55 °C (14 to 131 °F)
Storage Temperature	-20 to 70 °C (-4 to 158 °F)
Dimensions	185 x 242 x 36.9 mm (7.28 x 9.52 x 1.45 in)
Weight	875 g (1.93 lb)

Performance Specifications

Digital Inputs	16 (8) with Internal/External Power Supply, LED Indication Each group of 8 Isolated - 1500 Vac Transient Protection
Analog Inputs	4 (2), 14 bit 1500 Vac Isolation between all
Voltage	0-5, 0-10, 1-5 and 2-10 V
Current	0-20 and 4-20 mA Selectable Loop Power Supply
Digital Outputs	8 (4) SPDT Relay Contacts Resistive Load: 5 A, 250 Vac Galvanic isolation for each channel
Analog Outputs	2 (1), 12 bit, Fault Load Protection 1500 Vac Isolation between all
Voltage	0-10 and 2-10 V
Current	0-20 and 4-20 mA

Ordering Information:	IOS-ZNET-ZRTU1 IOS-ZNET-ZRTU2	RS232 to RS485 Isolated Serial Converter
Options:	IOS-ZRTU-OPTION G IOS-ZRTU-OPTION P	GSM/GPRS Modem Option for Z-RTU PSTN (Telephone) Modem Option for Z-RTU

Communications Specifications

Ports (1 each)	Ethernet RS232/RS485 Programmable RS485 Modbus Expansion RS232 Debug/User Internal for Modem Connection
GSM/GPRS	Dual band GSM 900/1800 MHz Data, Voice, SMS, FAX Up to 57.6 kbps GPRS Class 8 (Class 10 Optional)
Processor	CPU μ P RISC 32 bit - 10 MIPS
Memory	16 MB Flash 8 MB RAM, 64 Retention Variables
System Protocols	PPP, HTTP, FTP, SMTP, Modbus RTU Master (RS485) / Master-Slave) RS232/RS485, Modbus TCP/IP

Configuration Specifications

Software	Z-NET (IEC 61131 configurator) IEC61131 Programming Toolkit Z-NET RTU (Remote Control) OPC Server (Interexchange Data) Web Server Datalogger Trend
CE Norms	EN50081-2; EN55011; EN50082-2; EN61000-2-2/4; EN50140/141; EN61010-1; EN60742; EN 6100-6-2; EN61000-4
Modem Options	PSTN, GSM/GPRS
Other Features	Clock and Retention Variables Battery Power Supply Voltage Measurement

- DC POWER**
- 10-30 Vdc
 - 7 W min, 15 W max = 1.5 A max

- REMOTE COMMUNICATION**
- Housing for SIM + antenna GSM/GPRS
 - PSTN communication port

- I/O WITH CONNECTORS**
- 8+8 digital inputs (internal/external power supply)
 - 2+2 analog inputs (14 bits resolution, loop power)
 - 4+4 digital outputs (relay SPDT, capacity 5A 250 Vac)
 - 1+1 analog outputs (12 bits resolution, volt/current)

- SERIAL PORTS**
- RS232/RS485 programmable
 - RS485 Modbus RTU (connect I/O modules, ModBUS RTU/Master or Slave functions)
 - RS232 debug/user

- ETHERNET 10 BASE-T**
- Interface of control system with SCADA via OPC or Java/VB/Windows applications
 - Use of other protocols such as ModBUS TCP/IP, ftp, http

CE EN50081-2; EN 55011; EN 50082-2;
EN 61000-2-2/4; EN 50140/141;
EN 61010-1; EN 60742; EN 61000-6-2,
EN61000-4



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