

RTU32R



The universal rack mount controller for your infrastructure and utility application

Overview Data Sheet



- 500MHz 32bit x86 CPU
- 128MB RAM, 128MB FLASH
- 2x LAN, 2x Serial, 2x USB
- Embedded Web Server/HMI
- Sequence of Events Recorder
- Modbus/DNP3/IEC870/IEC61850
- SNMP Server/Agent and Client
- Fast IO scan time (<5mS)
- 12VDC/24VDC/240VAC P/S
 - Integrated UPS option
- 48DI, 8DO, 4AI with removable DB37F/DB25F rear connections
 - IO expansion (>500 IO)

Overview

The RTU32R Series is based on a 500MHz 32bit x86, industrial embedded CPU platform, providing flexible RTU/PLC functionality for a wide range of monitoring and control applications in the utility and infrastructure markets. Physical communication interfaces include 2x independent LAN 10/100MBit/s ports, 2x RS232 COM ports and 2x USB ports. The USB ports allow easy expansion of memory and/or ports via memory sticks, USB-Ethernet interfaces etc. The RTU32R supports external communication devices like data radios, GSM/GPRS/3G, Wi-Fi and PSTN modems and also includes VGA monitor and keyboard/mouse interfaces, allowing flexible local and remote HMI display.








The RTU32R has a flexible and open Windows CE Embedded Real Time Operating System, which combined with the STRATON IEC61131-3 logic 'engine' allows the RTU32R to be used in demanding applications where advanced control, communication and secure data handling is required. The RTU32R includes a variety of standard and open serial and IP style protocol interfaces such as Modbus, DNP3, IEC60870, IEC61850 and SNMP. A web server allows for rapid setup of the RTU configuration parameters (IP address, Time Sync options, IO options, SNMP Agent etc) and it also allows viewing of RTU data in a graphical format. Database and logic functions for management of control and communication are configured in the STRATON IEC61131 Workbench – that provides a modern, flexible, integrated development environment.

RTU32R

Technical Data - Overview

CPU	32bit AMD Geode LX800 at 500MHz, WinCE 6.0 Operating System
Memory	128MB SDRAM (supports up to 512MB RAM), 128-512MB removable CompactFlash card
Real time clock	Integrated and battery backed RTC with 1mSec resolution
COM ports (2)	2x RS232 DB9M
LAN ports (2)	2x independent 10/100Mbps RJ45
USB ports (2)	USB2.0, Type A
IO Local Bus	RJ45 for local IO expansion modules (add up to 32 IO modules per RTU, >500 IO)
LED Indications	Power, System, Run, I/O, COM1, COM2, LAN1, LAN2, one for each DI and DO.
Local HMI Interface	VGA (high density DB15F), PS/2 (KB/mouse/touch screen can also connect via USB)
Isolation – Digital Inputs	1kV AC (input to electronics)
Isolation – Digital Outputs	2kV AC 50Hz 1 min (IEC255-5), 4kV 50uS impulse withstand (IEC255-5)
Isolation – Analog Inputs	500V (input to input) – differential, flying capacitor inputs, with solid state multiplexer
Temperature - Ambient	Storage: -40 to +85C, Operation: -10 to +60C
Climatic Tests – IEC60068-2	Cold: -10C, 8 hours, Dry Heat: +55C, 8 hours, Damp Heat: 40C, 95% RH 8 hours
Mounting / Dimensions	1U High 19" rack mount, 250mm depth (excluding rear connectors), weight approx. 3kg
Housing / IP Rating	Black corrosion protected light duty steel, IP20
Digital Inputs (48)	48x opto isolated bipolar inputs 10-30/30-60VDC
Digital/Relay Outputs (8)	8x potential free SPST-NO contacts (individual commons)
Analog Inputs (4)	4x isolated 14bit analog inputs, software configurable 0-5/10V, 0/4-20mA, -10-+10V
Power Supply Options (3)	12VDC, 24-48VDC, 110-240VAC
Wide range of PLC/RTU protocols	Modbus TCP/Serial (Master & Slave), DNP3 with Secure Authentication TCP/Serial (Master & Slave), DNP3 WITS, AB Ethernet/IP, IEC60870-101/103/104, IEC61850 (Client & Server), PROFIBUS DP Master, ProfiNET Client, SNMP Server/Agent and SNMP Client

RTU32R Order code example

		RC-60IO /2 2 1 B 01 30.P6	
RTU32R Rack Mount Controller	RC-		.0 No IO on RTU
Basic – without IO	B		.P3 Digital Inputs 30-60VDC
48DI/8DO/4AI	60IO		.P6 Digital Inputs 10-30VDC
500MHz x86 CPU	/2		00 12VDC Power Supply
128MB RAM/Flash	2		10 110-240VAC Power Supply
Standard Configuration	1		30 24-48VDC Power Supply
Branding – Brodersen	B		01 COM1, COM2: RS232