RTU32R

Version RTU32R and IOR I/O Expansion modules

Rack I/O Expansion versions

IOR-32DI.P3
I/O Expansion module with 32 digital PNP transistor inputs 10-30VDC.

IOR-32DI.P6
I/O Expansion module with 32 digital PNP transistor inputs 30-60VDC.

IOR-08AI.Dx
I/O Expansion module with 8 analogue inputs. Resolution 12bit. Input ranges 0-10/4-20mA, 4-20mA, 0-20mA (factory setup).

Product overview

The RTU32R Series for 19" rack mounting are available in several versions of main controllers and I/O Expansion modules.

RTU32R Versions

RC-60IO/221B0110.P3
RTU32R with 48 digital inputs 30-60VDC PNP, 8 Relay outputs, 4 analogue inputs, 2 x LAN, 2 x RS232 and LocalBus for I/O Expansion. Power supply 115-230VAC/DC.

RC-60IO/221B0110.P6
RTU32R with 48 digital inputs 10-30VDC PNP, 8 Relay outputs, 4 analogue inputs, 2 x LAN, 2 x RS232 and LocalBus for I/O Expansion. Power supply 115-230VAC/DC.

RC-60IO/221B0130.P3
RTU32R with 48 digital inputs 30-60VDC PNP, 8 Relay outputs, 4 analogue inputs, 2 x LAN, 2 x RS232 and LocalBus for I/O Expansion. Power supply 24-48VDC.

RC-60IO/221B0130.P6
RTU32R with 48 digital inputs 10-30VDC PNP, 8 Relay outputs, 4 analogue inputs, 2 x LAN, 2 x RS232 and LocalBus for I/O Expansion. Power supply 24-48VDC.

How to reach us:

Denmark:
Brodersen Systems A/S
Islevdalvej 187, DK-2610 Roedovre
Tel: +45 45 35 26 27
Fax: +45 45 35 26 29

North America:
Brodersen Systems N. A. Inc.
1 Piedmont Center, Suite 400
Atlanta, GA 30305
Tel: +1 (404) 835 9420
Fax: +1 (678) 904 9714

E-mail: sales@brodersensystems.com
Web: www.brodersensystems.com

Or through one of our distributors or valued partners. You also find our comprehensive list of references online

BRODERSEN
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RTU32R

The universal controller for your infrastructure and utility application

19" RTU, PLC and SNMP Alarm and Control Device

BRODERSEN
simplifying systems

RTU32R

The Flexible SNMP Alarm and Control Device

The RTU32R is one of the most powerful and versatile SNMP Alarm and Control devices on the market.

Besides offering all the standard SNMP Agent functions like Trap, Get and Set, the RTU32R also provide you with standard programmable function. Any kind of special control and communication functions can be programmed in a standard IEC61131-3 PLC language suite supporting 5 different ways of programming. That means that you with the RTU32R supporting programming facility will be able to meet any end customer requirements.

The benefit of using the local control and management functions provided in the PLC program facility is that it can be used for;

- Enhanced intelligent alarm handling and control
- Local independent control functions like access control, dedicated UPS monitoring, power consumption monitoring and reporting, controlled actions like special shut down procedures and much more.
- Fast and event based reliable distribution of digital or analogue I/O signal from any remote site to another. Even string messages are distributable.
- Data communication with on-site equipment with a range of serial or Ethernet based drivers – e.g. meters, charger controllers, HVAC systems etc.
- Data logging of time stamped events in standard CSV files. You can freely design what and how and apply time stamps to logged event with up to milliseconds resolution.

All software including the actual configuration is placed on a replaceable Flash disc.

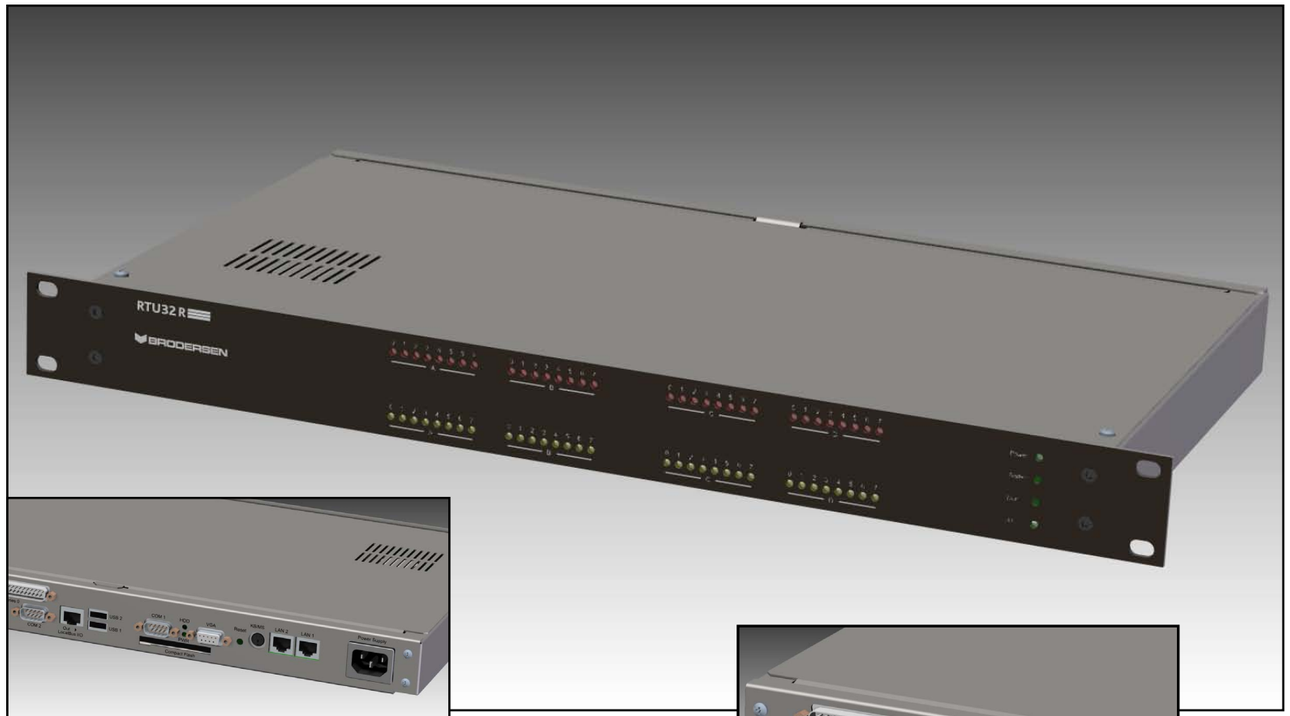
Software

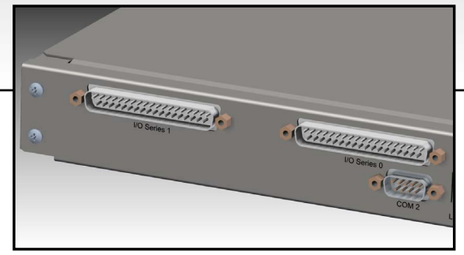
The general WinCE Operating System provides in addition the general Microsoft SNMP Agent that will provide SNMP info regarding the general network interfaces, Ethernet statistics etc.

All standard WinCE protocols like HTML, SNMP, SMTP, SNTP, FTP, PPP, Telnet etc. are supported. In addition RTU32R support some extended functions used on the standard protocols ensuring secure facilities for remote configuration and programming. Even complete remote upgrade/update of the OS is possible.

Configuration and Programming

The RTU32R are basically configured via the integrated WebServer using your browser. All network settings and SNMP configuration of SNMP Traps, Get, GetNext and Set settings for physical I/O can directly be configured. For analogue I/O you can assign several alarm limits and define use of Trap and/or only handled via Set/Get commands from your Network Management System.





Optionally RTU32R can be configured for local data manipulation via a standard full IEC61131 PLC runtime function. It can be programmed in any of the 5 IEC61131 compliant languages like e.g. Function Block or Structured Text programming. And only your imagination set the limits.

You can use Visual Studio and C++ or C# programming to manipulate data before sending SNMP it is also possible. Software Development Kit and Toolkit are available from Brodersen Systems A/S offering example codes etc.

Flexible I/O Configuration

RTU32R are available with integrated inputs/outputs and a number of I/O Expansion modules in 1U height can be connected to the RTU32R supporting digital and analogue inputs.

All digital inputs and outputs status are available via LEDs on the front of RTU32R.

Build-in I/O and I/O expandability of up to thousands of digital and analogue inputs/outputs signal makes it suitable for any size of application – handled in one platform.

Hardware and connectivity

RTU32R is based on a 32bit 500MHz platform with 128Mb RAM and removable 128Mb Flash in standard configuration.
It offers 2 basic power supply versions; 110-230VAC/DC and 24-60VDC.

Communication interfaces includes;

- 2 x LAN 10/100Mbit Ethernet interfaces
- 2 x RS232 interface for connecting local devices, modems etc.
- 2 x USB interfaces e.g. for keyboard/board or memory devices
- VGA and PS/2 interface for connecting monitor and mouse/keyboard
- LocalBus RJ45 interface for I/O Expansion device connection
- 2 x Sub-D 37-pin female connections for internal I/O
- Terminal connections for relay outputs

All connections are available on the backplane of the RTU32R.

Enclosure

Both the RTU32R and the IOR I/O Expansion units are designed in 19" Racks format, 1U heights and dept of up to 300mm.

Technical Specifications

CPU: AMD Geode 500 MHz
RAM: standard 128Mb – expandable up to 1 GB
Flash: Standard 128Mb CompactFlash industrial graded – expandable up to 2 GB

LAN: 2 x 10/100 Mbit Ethernet

COM: 2 x RS232 COM port speed up to 115.200baud
PS2: Mouse/keyboard interface for Mouse & Keyboard
USB: 2 x USB v2.0

VGA: For monitor

Power supply: 24-60 VDC nominal (20-72V) or 115-230 VAC/DC nominal (90-265V)

I/O LocalBus: support up to 32 I/O devices / > 1000 I/Os

Driver & protocols;
- SNMP Agent
- IEC60870 Suite
- IEC61850 Suite
- IEC61400-25
- DNP3 Slave/Server
- DLMS (Electricity Meters)
- Full Modbus Suite
- COMLI Master

Environmental specifications

Ambient temperature
Operation: -20 – 60°C
Storage: -40 – 75°C

Climatic:
Dry heat: IEC 68-2-2
Cold: IEC 68-2-1
Damp heat: IEC 68-2-3

EMC/LVD:
EN55022:1998 Class A
EN61000-3
EN55024:1998
EN61000-4
EN 61000-6-2
EN 61010-1