

# RTU32E

## Product overview

### RTU32E order code:

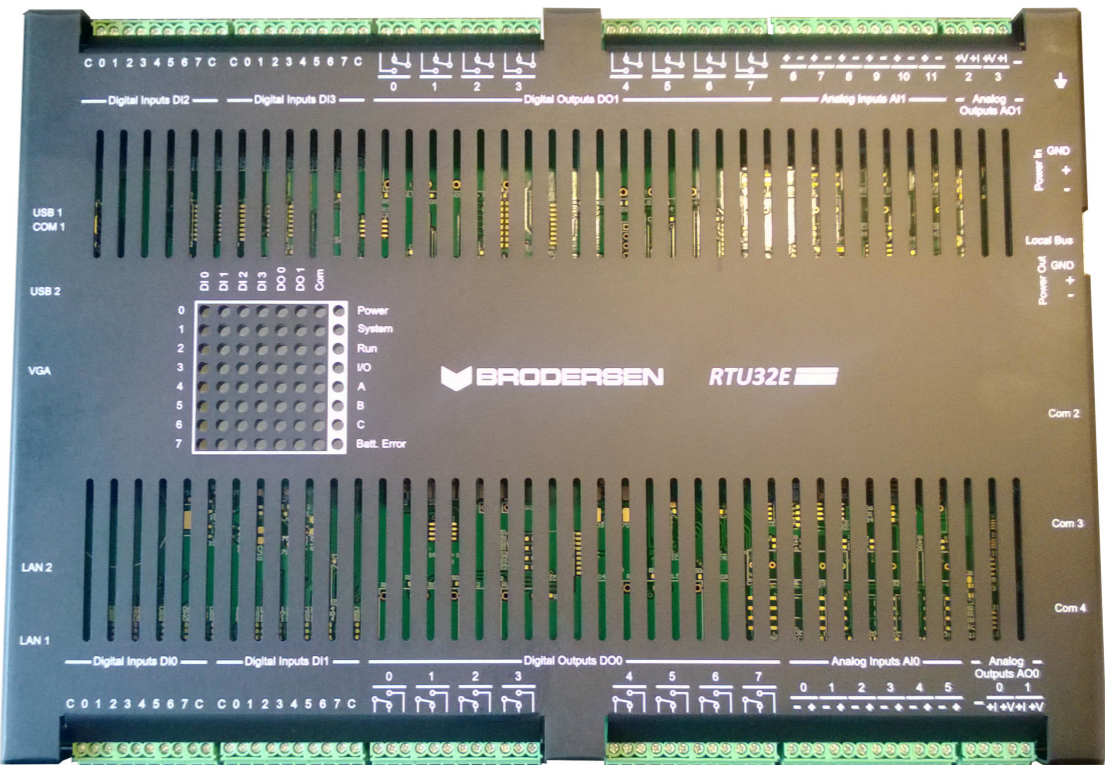
**BRE-64IO/231B0131.D1**  
BRE-64IO/231B0131.D1  
32bit 500MHz CPU, 128MB RAM, 1MB NVRAM, 128MB Compact Flash  
32 digital inputs/Counters 10-30VDC,  
16 relay outputs (SPDT each with NO, NC, C),  
12 analogue inputs (14bit resolution and configurable voltage and current ranges),  
4 analogue outputs (14bit resolution and configurable voltage and current ranges),  
2 x LAN, 4 x RS232, 2x USB, 1x VGA and a LocalBus port for I/O Expansion.  
Power supply 10-30VDC

### Driver order code:

DL-IEC61850S-RL	IEC61850 Server driver with GOOSE/MMS
DL-IEC61850C-RL	IEC61850 Client driver
DL-SNMP-RL	SNMP Agent driver
DL-PROFINETC-RL	ProfinET Client driver
DL-DNP3S-RL	DNP3 Slave Serial/Ethernet driver
DL-DNP3M-RL	DNP3 Master Serial/Ethernet driver
DL-DNP3SWITS-RL	DNP3 WITS Slave Serial/Ethernet driver
DL-118.C37C-RL	118.C37 Phasor Client Driver
DL-DLMS.1-RL	DLMS/IEC62056 Master driver
DL-DF1M-RL	AB DF1 Master driver
DL-ETHIPC-RL	ETHERNET IP Client/Scanner driver

# RTU32E

The universal controller for your infrastructure and utility application



## How to reach us:

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

**Asia Pacific:**  
Brodersen Asia Pacific  
832 High Street  
Kew East VIC 3102, Australia  
Tel: +61 3 9249 9505  
Fax: +61 3 9249 9600

E-mail: [sales@brodersen.com](mailto:sales@brodersen.com)  
Web: [www.brodersen.com](http://www.brodersen.com)

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

**North America:**  
Brodersen N. A. Inc.  
Five Concourse Parkway, Suite 1000  
Atlanta, Georgia 30328, USA  
Tel: +1 (404) 965 3631

**Korea:**  
502-#1303, Gong-Duk Raemian  
Gong-Duk Dong  
Mapo-Gu, Seoul, Korea  
Tel: +82-2-6383-5910

**United Kingdom:**  
Davidson House Forbury Square  
Reading  
RG1 3EU  
Tel: +44 (0) 207 592 8963

## Retrofit out of the box

Footprint from the past, functionality of the future.

# RTU32E

## The Flexible RTU

The RTU32E is powerful and versatile. It provides current and future-proof functionality - with a footprint and connectors to fit the past. It allows rapid upgrade of legacy equipment and avoids the significant costs of replacing or rewiring cabinets.

The RTU32E supports IP and serial connections using PSTN, leased lines, GSM, GPRS, 3G/4G, ADSL and radio. A wide selection of communications drivers enables interfacing with various SCADA hosts, RTUs, PLCs and field devices. SCADA protocols include IEC61850, IEC60870, MODBUS, DNP3 and DNP3 WITS.

With 64 on board I/O (12x AI, 32x DI, 16x DO and 4x AO), built in 3G modem support, 2x high-speed LAN, 4 serial ports + 2x USB ports, Brodersen makes it easy to upgrade and meet the demands for the future

## Configuration and Programming

The RTU32E is programmed with the same Brodersen WorkSuite software as the rest of the RTU32 series. Brodersen post examples on YouTube on how to use the programming tools and setup the different drivers.

Setup of I/O and communications interfaces such as LAN, VPN & 3G is via the integrated web server that also displays the status and values of the internal and external I/O. The I/O values can be monitored on site or remotely by engineers and end users in textual or graphical formats. The VGA port can be used for presentation of data - simply connect a touch screen monitor and display status, trends, alarm summaries and reports, plus allow secure access to the RTUs application setup.

Our IEC61131-3 compliant WorkSuite software includes 5 logic programming languages, a range of industry standard IEC61131-3 logic functions, plus RTU specific function blocks including PID Auto tune, Ping, Redundancy, Log to CSV file, Peer to Peer communications and many others. User defined Functions and Function Blocks can be made using the WorkSuite logic tools, or created in high-level languages like Visual C++ and C#. This means that with the RTU32E you will be able to meet any end user application requirements.

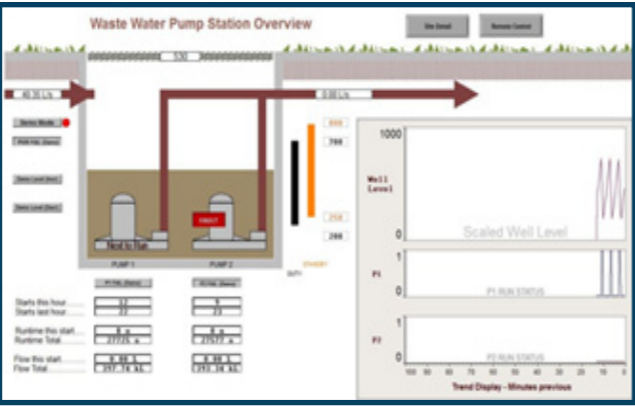
## Software

The RTU32E includes secure facilities for remote configuration and programming. IT protocols HTML, SNMP, SMTP, SNTP, FTP, PPP, Telnet and VPN are supported. All O/S code, logic, I/O configuration, port settings, unread event data and report/log files are stored on a removable Flash card. This allows rapid updating of application or O/S code and 'swap and go' replacement of RTU hardware if a failure should occur.

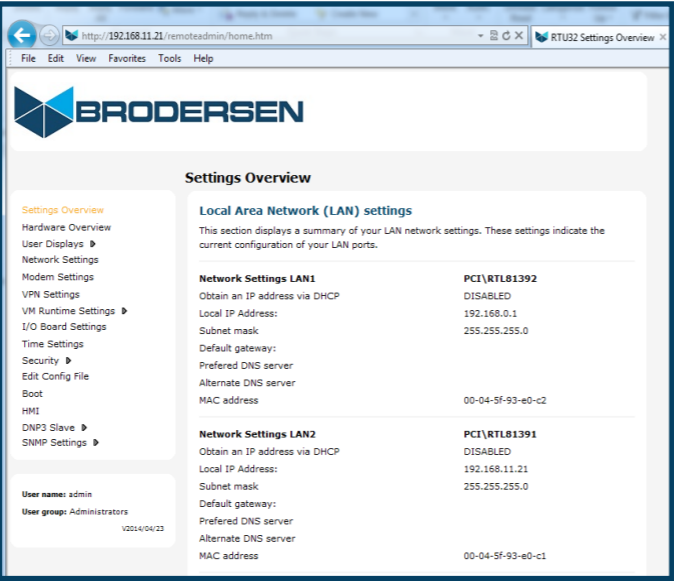
## Flexible I/O Configuration

The RTU32 family auto detects the presence of all Brodersen I/O modules, allowing 'plug and play' style I/O setup.

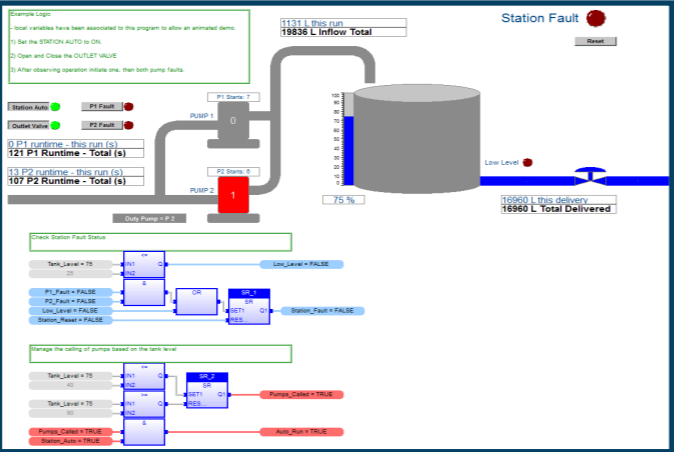
## Create your own HMI web pages



## Manage RTU setup from the integrated web server



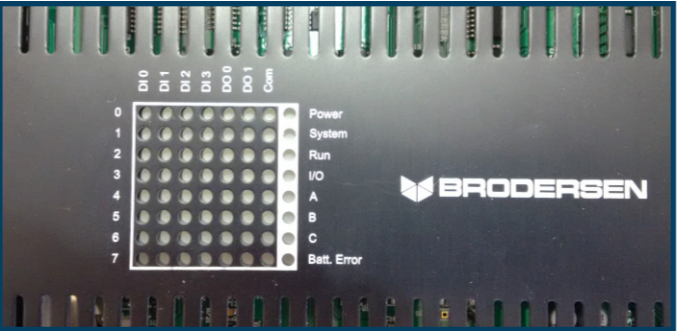
## Use graphics to easily monitor or debug your logic



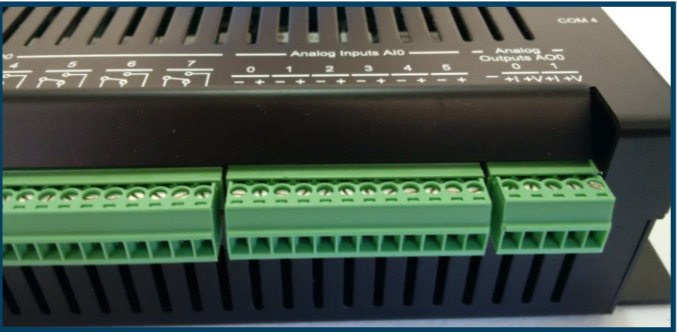
## Layout conforms with legacy RTUs



Dual Ethernet & USB



All digital inputs and outputs provide status indication via a LED Matrix on the RTU32E front panel.



All I/O and power terminations use removable connectors located in similar positions to those found on legacy RTUs.



More Communications interfaces & dedicated localbus for I/O expansion

## Enclosure

The RTU32E is housed in an anodized black aluminium enclosure suitable for panel or DIN rail mounting. HxWxD: 55x302x192 mm. incl. brackets and I/O connectors

## Hardware and connectivity

The RTU32E is based on a 32bit 500MHz platform with 128Mb - 1GB RAM and removable 512Mb – 4GB Flash. The power supply is 10-30 VDC with on board monitoring of supply voltage and temperature.

## Technical Specifications

- CPU: AMD Geode 500 MHz
- RAM: Standard 128 Mb – expandable up to 256 Mb  
1 Mb Non volatile Ram
- Flash: 512 Mb - expandable up to 4 GB
- LAN: 2 x 10/100 Mbit Ethernet interfaces
- COM: 4 x RS232 COM ports - up to 115 kbps
- USB: 2 x USB v2.0
- VGA: For monitor/touch screen
- Power: 10-30 VDC power supply input
- I/O: on board includes 32x DI, 16x DO, 12x AI, 4x AO
- Support for up to 32 I/O modules > 1000 I/O

## Environmental Specifications

- Temperature:  
Ambient: -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 60950