

NETSURE™ CONTROL UNIT (NCU)

M830B, M830D



KEY FEATURES

- Simplified user interface includes an installation wizard, graphical color display and user friendly web pages
- Backwards compatible with ACU, SCU, ACU+ and SCU+
- Supports encrypted (HTTPS) multi-browsers including IE6.0 or above, FireFox, Chrome, Safari
- Ethernet connectivity via IPv4 and/or IPv6
- Dual Network port option which allows for permanent connection and available craft port for service PC simultaneously
- Modbus as monitoring option– communicates with energy devices and/or a supervisory computer (NOC)
- Battery management features include temperature compensation, thermal runaway management, recharge current limit, reserve time prediction, and optional midpoint monitoring
- Easily configurable file upload/ download minimizes installation time
- Supports six user-selectable languages
- Intelligent Load Management support for systems that include SMDU+ or SMDUH

The advanced NetSure™ Control Unit (NCU) from Vertiv™ takes remote monitoring and control to the next level with a user-friendly color interface, secure connectivity, data statistics and multiple communication options.

Description

The NetSure™ Control Unit (NCU) is an advanced controller designed for a wide range of DC power applications. The NCU enables remote monitoring and control of modern communication sites and is backward compatible with existing NetSure power systems. The controller is factory installed or can be added in the field to deliver data and control for all aspects of the power chain, including AC mains, DC power plant, battery backup, diesel generator and the local site environment. The addition of optional interface boards enables the user to access an even greater set of site parameters.

The NCU features advanced battery management for temperature compensation and boost charge control, prediction of remaining time and capacity, constant current testing, scheduled battery testing, and short duration battery testing. Thresholds for battery current measurement, detailed alarms, inventory management and three LVD levels can be programmed easily through the controller. Control of rectifiers (24V, 48V and 400V) and converters (24V, 48V, 400V and solar) is possible in this convenient pluggable module.

Expanded information and alarm data can be monitored or controlled via password protected and encrypted web browsers, including Internet Explorer, Firefox, Google Chrome, and Apple Safari. Network element management support for data

communication is also available via standard protocols, such as SNMP version 2 and 3, and Modbus. In addition, Modbus device integration for many industry standard monitoring devices is now possible with the versatile NCU controller.

The new patent-pending Intelligent Load Management functionality displays current per fuse and circuit breaker and can measure each site rack's aggregated current in relation to rack capacity. This feature requires optional system distribution measurement devices for breaker or fuse positions.



M830B



M830D

Technical Specifications

| GENERAL | | |
|---------------------------------|---|---|
| Power Supply | 19 VDC to 60 VDC | |
| Power Consumption, Maximum | 18 W | |
| Temperature Range, Operating | -40°C to +70°C / -40°F to +158°F | |
| Relative Humidity | 0 to 90% | |
| SAFETY AND STANDARDS COMPLIANCE | | |
| Electrical | IEC 60950-1, EN 60950-1, UL 60950-1 | |
| EMC | EN 300 386, 2001 Class B; FCC Part 15, Class B | |
| Environmental | CE; NEBS Level 3 | |
| MECHANICAL DATA | M830B | M830D |
| Dimensions (H x W x D) | 43.4 x 86 x 208 (mm) 1.65 x 3.41 x 8.33 (inches) | 86.2 x 87 x 208 (mm) 3.41 x 3.42 x 8.33 (inches) |
| Standard Installation Methods | Hot pluggable in stand-alone or embedded power plants | |
| Weight | < 1 kg / 2.2 lbs. | |
| INPUTS/OUTPUTS | M830B | M830D |
| Display | 128 x 160 Pixels TFT LCD | 320 x 240 Pixels TFT LCD |
| Communication | RS232, RS485, Ethernet, USB | |
| Protocol | IPv4, IPv6, HTTPS, SNMP V 2 / V 3, EEM, SocTpe, Rsoc, Mod Bus | |
| Analog Inputs | 2 battery currents, 1 load current, 1 bus voltage, 2 battery voltages, 3 temperatures, 1 fuel level sensor and much more with additional interface boards | |
| Digital Inputs | 1 input for status of surge protective device auxiliary contacts, 12 load fuses, 6 battery fuses, bi-stable contactor status | |
| Outputs | 3 LVD mono & bistable contactors | |



NetSure™ Control Unit User Interface



Web Interface Home Page

Ordering Information

| MODEL | PRODUCT CODE | DESCRIPTION |
|--------------------------|--------------|--|
| M830B | 1M830BAXX | NCU3.0+ controller, 1 x 2 RU |
| M830D | 1M830DAXX | NCU3.0+ controller, 2 x 2 RU |
| OPTIONAL INTERFACE BOARD | | |
| EIB | | 5 relay outputs, 8 DC voltages, 3 DC currents, 2 temperatures |
| IB1 | | 4 relay outputs, 4 digital inputs |
| IB2 | | 8 relay outputs, 8 digital inputs, 2 temperatures |
| IB4 | | 1 additional Ethernet port |
| SUPERVISION MODULES | | |
| SMDU | | 4 shunts, 1 voltage input, 20 fuse alarms, and 2 LVD controls |
| SMDU+ | | 25 shunts, and 25 fuse alarms |
| SMTEMP | | Temperature concentrator with up to 8 temperature sensors |
| SMDUH | | 20 Hall effect sensors to measure DC distribution load current from 0 A to 100 A |

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