NETSURE™ CONTROL UNIT (NCU)

M830B, M830D

VERTIV

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	3.5 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	< 0.3 kg / 0.66 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