

Mini NetSure™ Control Unit

M831A



Key Features

- Simplified user interface includes an installation wizard, and user friendly web pages
- Supports encrypted (HTTPS) multi-browsers including Internet Explorer, FireFox, Chrome, Safari
- Ethernet connectivity via IPv4 or IPv6
- Dual network port option for a permanent connection and available craft port for PC
- Monitoring options include Modbus, SNMP, TL1, EEM and YDN23
- Designed to communicate with local energy devices and/or a remote supervisory computer (NOC)
- Battery management features include temperature compensation, thermal runaway management, recharge current limit, reserve time prediction, and optional midpoint monitoring
- Configuration files can be easily uploaded/downloaded to minimize installation time
- Supports up to six languages, depending on region

The Mini NetSure™ Control Unit from Vertiv™, designed for extremely dense power applications, takes remote monitoring and control to the next level with a user-friendly web interface, secure connectivity, data statistics and multiple communication options.

Description

The Mini NetSure™ Control Unit (NCU) is a compact controller designed for extremely dense DC power applications, enabling remote monitoring and control of modern communication sites. This convenient pluggable module controls both rectifiers and converters and is factory installed or can be added in the field. The Mini NCU controls all aspects of the power chain, including AC mains, DC power plant, battery backup, and the local site environment. The addition of optional interface boards enables the user to access an even greater set of site parameters.

Battery management features include temperature compensation, thermal runaway management, recharge current limit, reserve time prediction, and optional midpoint monitoring. Battery testing options include scheduled battery testing and short duration battery testing. Detailed alarms, inventory management and two LVD levels are easily programmed.

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 or 3, and Modbus. In addition, Modbus device integration for many industry standard monitoring devices is possible.



Technical Specifications

Power

| | |
|----------------------------|------------------|
| Power Supply | 36 VDC to 60 VDC |
| Power Consumption, Maximum | 18 W |

Environmental

| | |
|-------------------|---|
| Operating | -20°C to +65°C (nominal), -40°C to +75°C (extended conditions) / -4°F to +149°F (nominal), -40°F to +167°F (extended conditions) |
| 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 |
| Environment | CE; NEBS Level 3 |

Mechanics

| | |
|-------------------------------|---|
| Dimensions (H x W x D) | 43.5 x 52 x 152 (mm) 1.71 x 2.05 x 5.98 (inches) |
| Standard Installation Methods | Hot pluggable in stand-alone or embedded power plants |
| Weight | 1 kg / 2.2 lbs. |

Inputs/Outputs

| | |
|----------------|---|
| Communication | RS485, Ethernet, USB (for software upgrades) |
| Protocol | IPv4, IPv6, HTTPS, SNMPv2/v3, EEM, SocTpe, Rsoc, Modbus |
| Analog Inputs | 2 battery currents, 1 load current, 1 bus voltage, 1 battery voltage, 2 temperatures, and much more with additional interface boards |
| Digital Inputs | 2 digital inputs, 1 load fuse input, 4 battery fuse inputs |
| Outputs | 4 digital outputs, 2 LVD mono or bistable contactors |

Ordering Information

| Model | Product Code | Description |
|-------|--------------|---------------------------------|
| M831A | 1M831AXX | Mini NCU controller, 1.2 x 1 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 Models

| | |
|--------|--|
| 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 |
| SMDUH2 | 40 hall effect sensors to measure DC distribution load current from 0 A to 100 A |
| SMI02 | 10 load fuses, 10 DC volts measurements, 3 DOS |