BC2000 Series
System Controller

Overview:

The BC2000 is a state-of-the-art system controller that provides alarm notification, complete system control, and advanced battery monitoring—all in a simple, easy-to-use interface.

Available with both local and remote user interfaces, Eltek Valere controllers lower your overall network power management costs by putting the power of real-time information at your fingertips.

Controller Highlights

Convenient Design
BC2000 is the monitoring and control unit used in Eltek Valere's Compact, Integrated, and HJ-Series Mini systems. A simple "plug-and-play" design makes it easy to install or replace an existing controller. Fail-safe architecture ensures that power systems will continue to operate if the controller is disconnected.

Multiple Interfaces
System control and monitoring can be executed through both local and remote interfaces. Local interface consists of a control panel with a back-lit Organic LED display, two soft buttons, and a scroll knob. Remote monitoring and control is possible via an Ethernet port and supports HTTP, SNMP, TELNET, and TL1 protocols.

Battery Management
Battery management provides such features as float voltage control, battery current limit, battery boost (equalizing), battery discharge tests, thermal runaway protection, thermal compensation for VRLA batteries, and low-voltage disconnect monitoring.

Configurable Alarms
System alarm monitoring consists of six form-C relays, audible alarm alerts, and four peripheral input ports—all fully configurable.

Expansion
An I²C expansion port is provided for multi-shelf control of up to 10 rectifiers. A controlled area network (CAN) bus permits expansion to peripheral devices.
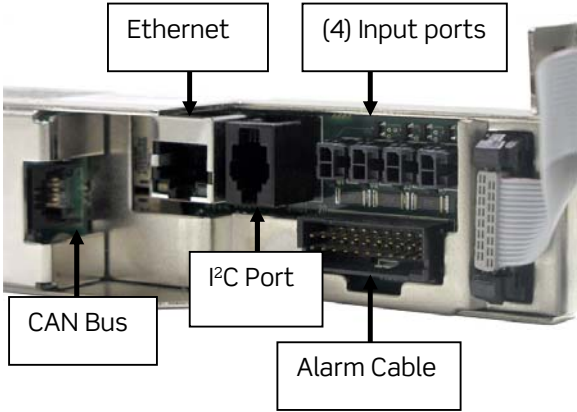
Advanced Features

- Easy "plug-and-play" installation
- Fail-safe design
- Convenient local and remote interfaces
- Multi-level password protection
- Back-lit Organic LED (OLED) control display
- Two soft-button function keys and a scroll knob
- Ethernet port for computer interface
- Web interface through Internet browser
- TELNET interface through command console
- SNMP communication with up to four IP addresses
- TL1 protocol support
- Syslog event log with up to two IP addresses
- CAN communication port
- Configurable visible and audible system alarms
- Six form-C alarm relays
- One internal temperature sensor
- Four auxiliary input ports for temperature probes and/or external alarms
- Controls and monitors up to 10 rectifiers, four LVD contactors, and four battery/load shunts
- Adjustable real-time clock
- Multiple battery discharge test (BDT) graphs
- Missing thermal probe detection
- Battery thermal runaway protection
- Event log history
- Load history graphs (24 hr and 3 year)
- Diesel generator interface

See reverse side for specifications

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Additional Specifications

CONTROLLER DETAILS

Local Interface	Display with back-lit OLED, two function buttons, and scroll knob
Remote Interface Port	10/100BASE-T Ethernet
Remote Interface Protocols	HTTP, TELNET, SNMP, and TL1
SNMP Alerts	Alarm indication alerts to as many as four IP addresses via SNMP traps
SNMP Heart Beat	Controller-generated ping indicates operation
Syslog Event History	Alarm and event history reported to as many as two IP addresses via Syslog
Auxiliary Input Ports	Four configurable input ports for temperature probes, distribution alarms (NO/NC), or auxiliary alarms (NO/NC)
Output Alarms	Six form-C dry contact relays
Alarm Relay Configuration	Fully configurable alarm mapping via remote web interface
Alarm Indicators	Green and red LED lamps and audible alert tones
Audible Alarm	Audible alerts can be set to indicate major, minor, major and minor, or any alarm triggers
Event Log	Stores up to 250 events
Battery Discharge Test (BDT)	Manual, auto, and up to 12 user-scheduled start modes
BDT Results	Voltage/Current vs. Time graph, pass/fail indicators, and up to eight saved test results
Battery Boost (Equalizing)	Manual mode and three automatic modes: periodic, battery current, and AC fail
Battery Thermal Compensation	High and low temperature compensation to maintain proper VRLA battery temperature
Battery Current Limit	Available in systems with battery shunt or low-voltage disconnect (LVD)
Rectifier Current Limit	Limits individual rectifier current output
System Presets	Three factory-configured sets of system values
Multi-shelf Control	Available Inter-Integrated Circuit (I²C) port to connect to an expansion controller
Password Protection	Multi-level protection for remote and local interfaces (any character except period, comma, and semi-colon)

OPERATION RATINGS

Form-C Relay Rating	Up to 0.5A at 60V
Storage Temperature	-40 °C – 85 °C
Operating Temperature	-40 °C – 75 °C
Voltage Accuracy	±1.0%
Current Accuracy	±2.5%

CONTROLLER CONNECTIONS

CAN (Controller Area Network) bus	Provides a port for interface with Eltek Valere peripheral monitoring (PM) devices
Ethernet Port	Computer access port for HTTP, Telnet, or SNMP communication
Expansion Port	I²C interface for communication with expansion controller (EC) or LVD controller
Input ports	Four identical input ports that work as normally-open or normally-closed auxiliary alarm connections or temperature probe input connections
Alarm Cable	Twenty-pin connector for an output alarm cable. Provides normally-open and normally-closed outputs for each of six output alarm relays

www.eltekvalere.com

Headquarters:
Eltek Valere
1303 E. Arapaho Rd. Richardson, TX. 75081, USA
Phone: +1 (469) 330-9100   Fax: +1 (469) 330-2955

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