

ACM1000

Flexible alarm and control module
for monitoring and control
of stand-alone power systems



Key Features

- Individual control of up to 12 rectifiers, with extension capability
- Automatic detection of rectifier and system faults
- Hot-plug capability
- Local key pad (three buttons) for local parameters configuration
- Back lighted display for monitoring (alarms and system status), control and configuration
- Load voltage and current monitoring
- Battery voltage and current monitoring
- Flexible battery management: programmable temperature compensation and current limitation
- Automatic/manual boost charge
- Low voltage disconnect (LVD) to protect batteries against deep discharge
- Non essential load disconnection to expand battery autonomy
- Battery discharge test at constant current with automatic/manual initiation

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>> ACM1000

- Battery connection test with automatic/manual initiation
- Battery capacity meter
- Local and remote alarm reporting with ~50 built-in alarms + 10 spare alarms (customer defined)
- Alarm and battery tests history log files of 512 events with time stamping
- Spare inputs for monitoring external devices
- Spare outputs to control auxiliary devices (configurable conditions)
- Proprietary protocol to monitor/configure the system with password protection (4 levels)
- Win1000 / Winsite Windows-compatible software
- Remote access via optional modem
- Remote access via optional TCP/IP gateway (SNMP, email, Web, ...)
- Alert capabilities on modem and SMS
- Modbus/Jbus protocol
- Equation interpreter for total customer flexibility in alarm condition definition and configuration
- Expandable with extension boards (8 relays board, ...)

For use in systems:

MPS700C, MP60, MP100, MP160, MTP2000C

For use with rectifiers:

SM700, SM1600, SM1800, SM2000, SM5700

For use with PC software:

Win1000e, Win1000, Winsite

SPECIFICATION

INPUT

Input voltage	18 - 75 Vdc
Nominal current	0.4 A (48 V input)

CONNECTIONS

Measurements	Load voltage Battery voltage Battery current (shunt measurement / Hall effect selectable) Load current (shunt measurement / Hall effect selectable) Temperature through analogue sensor Temperature through digital sensor (up to 2 sensors)
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Alarm and general purpose outputs	Opto isolated outputs Urgent/Non urgent alarm reporting Spare output for customer defined control (fans, ...) Front panel LED alarm indication (green / red)
Low voltage disconnect	Opto-isolated output LVD1 drive/feedback - controls battery low voltage contactor LVD2 drive/feedback - controls non-essential load contactor
Auxiliary inputs	17 digital inputs for rectifier fault detection, protection devices monitoring (fuses) and auxiliary equipment monitoring
Communications	Direct RS232 connection Or optional modem connection (PSTN / GSM), Or TCP/IP gateway (*Win1000 Windows interface software package available)

PROTECTION

DC supply inputs	Internal input fusing on both DC polarities
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MECHANICAL SPECIFICATION

Dimensions	Controller board + display module assembly: height: 43 mm (1 U) / width: 108 mm / depth: 198 mm Controller board standalone: height: 25 mm / width: 100 mm / depth: 167 mm
Weight	< 0.5 kg
Ingress Protection	IP00 alone (IP20 when integrated in a system)
Mounting	Horizontal 1U, within associated systems, with adequate runners
Connections	Hot pluggable, with rear connection. Possibility for the display to be remote.

ENVIRONNEMENTAL

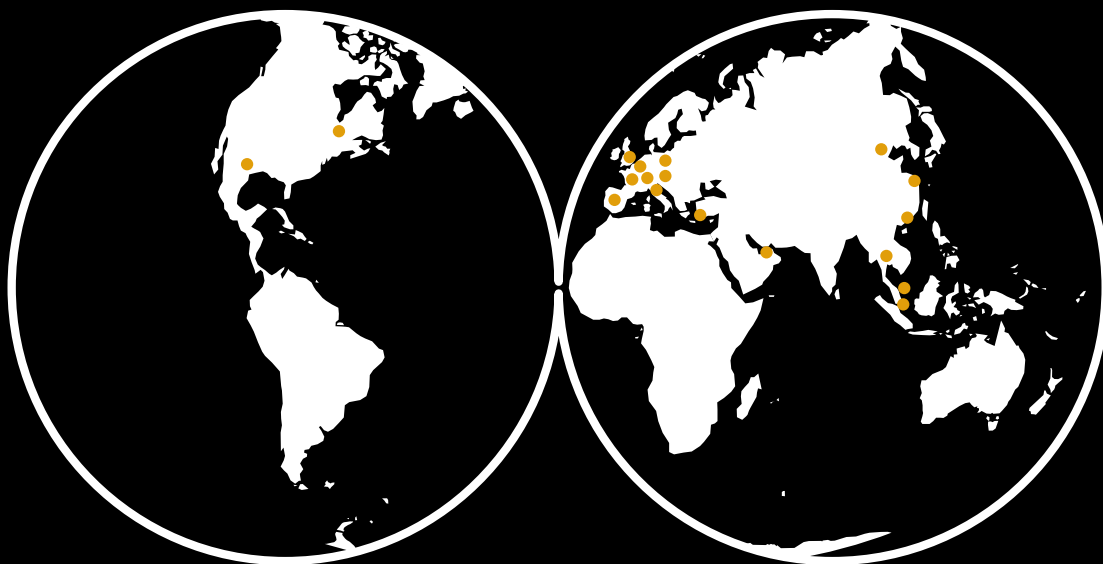
Cooling	Natural cooling
Operating temperature	- 25 °C to + 70 °C ambient
Storage temperature	- 25 °C to + 80 °C ambient
Humidity	0 % to + 95 %, non condensing
Altitude	0 - 4000 m operating maximum

STANDARDS

Safety	EN60950
EMC (inside system)	Emission: EN61000.6-3 / 6.4, EN61000.3-2/3.3, EN55022 Class B Immunity: EN61000.6-1/6-2, EN61000.4-2/4-3/4.4/4.5/4.6/4.11
Telecom Network	EN 300386, EN300132-2
Environment	EN 300019 (transportation storage and operation) ROHS Directive on Restriction of use of certain Hazardous Substances WEE directive on Waste Electrical and Electronic Equipment
Approvals	CE, with the associated system

AVAILABLE CONFIGURATION

Products reference	ACM1000 controller module
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