

Reliable Power

ACMi1000HD

System Controller



Use our energy
to save yours

ACMi1000HD

Control of stand-alone
power systems based
on switch mode rectifiers



Key Features

- Integrated backlit display with 5-axis joystick
- Digital interface (CAN bus) architecture for increased functionality, flexibility and reliability
- Modular design with powerful expansion capabilities
- True plug and play
- Automatic download of configuration from the system
- Pre-loaded configuration file
- Remote monitoring with optional modem or LAN (TCP/IP gateway, SNMP, email, Web,...)
- Individual control for up to 32 rectifiers, expandable up to 64 rectifiers
- Comprehensive system control functions
- Comprehensive Battery management
- Control for up to three low voltage disconnects (LVDs)
- Access security through multi-level password protection
- Local firmware upgrades
- Remote download for different language support
- Data logging of event history

Description

The ACMi1000HD is a hot-pluggable, modular, flexible power system controller for DC power systems; from small systems up to very large and complex systems. The ACMi1000HD provides full control of a wide array of system parameters; voltage, load current, system capacity, protection status, battery information and alarms. The controller has local monitoring through a USB port and offers remote monitoring options via Ethernet (over TCP/IP, Internet) or via modem (GSM or PSTN). The controller is supplied factory pre-configured, ready for use. It can be re-configured using Wini1000 configuration software, either on-site via the front panel USB port, or remotely.

Applications:

Small to large DC power systems
Decentralized DC power plants

PERFECT IN FORM AND FUNCTION

The AEG logo is the letters "AEG" in a bold, red, sans-serif font.

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Specification

DC Input	
Voltage Range	19V to 60V DC
Power consumption	< 2W
Protection	Internal fuse
Input/Output	
Analogue Inputs	6
Digital Inputs	16 (up to 12, user configurable)
Relay Outputs (volt-free contacts)	Up to 6 configurable, form 'C' contacts Relays fitted on interface PCB
Expansion	Optional – I/O expansion
Communications	
Internal	CAN bus
External	
Front face	USB port, type B
Internal interface	For LAN/Modem options
Software	WINi1000 (Windows-based)
Modems (optional)	GSM/PSTN
SMS Messaging	System status and alarm messages. Requires external GSM modem
NCS (Network communications server)	Ethernet LAN connection (TCP/IP, SNMP and HTTP protocols)
MMI (Man Machine Interface)	
Display	128x128 pixel LCD, back-lit with automatic dimming
Joystick	5 axis, tactile
Mounting orientation	Auto image & axis correction for horizontal/vertical mounting
LEDs	
Green	Power On, System OK (= no faults or alarms)
Red, blinking	System Warning (= Minor Alarm)
Red	System Alarm (= Major Alarm)
ECO^{px}	
Energy Saving	
LVD	Drive for 'Zero-power' contactors
Rectifier sleep mode	Algorithm to turn off excess power Rectifier rotation for enhanced reliability

Specification

FUNCTIONS

System

Output voltage measurement
 Load current measurement
 Load/Battery disconnect
 Alarm level setting (major/minor)
 Alarm log (up to 512 events)
 Real time clock (battery backed)

Battery

Current measurement (x2)
 Temperature measurement (x2)
 Temperature probe protection
 Battery presence and cell failure detection test
 Battery capacity (Ah)
 Battery life indication
 Automatic battery current limit adjust
 Temperature compensated charging
 Boost charging

Rectifiers

Individual rectifier information
 Individual rectifier control
 Individual rectifier on standby
 Sequential start up (walk-in)
 ECOpx Efficiency mode
 Load sharing (without controller)
 Current limit adjustment
 Over voltage adjustment
 Missing rectifier detection
 Rectifier fan performance

ALARMS

System

Mains failure
 Digital inputs
 Load disconnect (LVD)
 Load circuit breaker
 Load current

Battery

Low battery voltage
 High battery voltage
 Low battery temperature
 High battery temperature
 Battery temperature probe fault
 Battery disconnect (LVBD)
 Battery breaker / fuse detection (up to 4)
 Battery discharge current
 Battery capacity (Ah)
 Battery life

Rectifiers

Rectifier failure
 Critical rectifier failure (>1)
 Rectifier current limit
 Rectifier over voltage protection
 Rectifier over temperature protection
 Rectifier fan failure
 Rectifier current sharing error

Programmability

Alarms programmable for;
 Severity (major, minor, informative)
 and Thresholds (delay, logic, latched)

Specification

Mechanical		
Dimensions (H xW x D), mm	44(1U) x 88(2U) x 180	
Weight	< 0.5kg	
Mechanical		
Cooling	Natural convection	
Ambient Temperature	-25°C to +70°C -40°C to +75°C	Full performance (excluding LCD display) Safe operation
Storage Temperature	-50°C to +85°C	
Humidity	5% to 95%	Non-condensing
RoHS	2002/95/EC	
WEEE	2002/96/EC, 2003/108/EC	

Services

With over 60 years of expertise in power systems and solutions, AEG Power Solutions is renowned for its unparalleled services and technical support in critical application environments. As the world class system provider, you can rely on a global network of 20 Service Centers supported by over 150 field engineers and more than 100 certified service partners around the world. From the power solution selection to your process installation and commissioning, our certified experts go beyond your expectations by offering service excellence that will ensure the lowest operational cost for your mission-critical equipment. The reliability of your installed power solutions is supported by a Global Service Team renowned for its short response time and trouble shooting efficiency. Choosing one of the Pro Care™ Preventive Maintenance Options gives you the ultimate peace of mind reassuring complete cost control, security and uninterrupted power supply in utmost critical situations.

You can also benefit from a full range of professional services that will protect and ensure the durability of your investment and will take over when you need it the most.

- Pro Care™ Preventive Maintenance Options
- Turnkey solutions
- Installation and commissioning
- Maintenance services
- E-Service/remote monitoring
- 24/7 hotline
- Onsite training
- Hot swapping
- Onsite battery replacement
- Battery monitoring
- Facility and equipment management
- 24/7 global onsite contracts
- Power quality assessment
- Load bank & site capacity analysis
- Trouble shooting and repair

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