EC1000

Energy Box with Real-time Power Monitoring



The EC1000 Energy Box is the latest evolution of ATEN's energy intelligence solutions. It is the intelligent, cost effective solution to monitor ATEN's Energy PDUs – to ensure safe and effective energy-saving power management.

The EC1000 Energy Box has four Energy Sensor ports to connect to four Energy PDU modules and four Environment Sensor ports for external sensors to monitor environmental conditions. Each environmental sensor can provide measured readings of temperature, humidity, and differential pressure from separate areas of a data room, giving a wide range of monitoring and protection you need.

The Energy Box allows power and environmental data to be monitored and displayed at the rack or remotely for easy viewing and maintenance. The Energy Box is a standalone unit with Over IP monitoring that is controlled by Web GUI or ATEN's eco DC (Energy & DCIM Management / Web GUI) software.

The EC1000 Energy Box features real-time status, system logs, threshold alerts, and event notifications. The EC1000 logs power and environmental conditions according to customizable minimum/maximum thresholds set for electrical current, temperature, humidity, and differential pressure.

Remote monitoring offers secure access with 128bits SSL encryption, and customizable account policies for user management. Remote authentication supports RADIUS and additional management interfaces including HTTP, HTTPS, and SNMPv1 & v2 & v3 (Read, Write, Trap). Event notifications can be monitored via Syslog / SMTP / SNMP trap and audible alarms for real–time local and remote alerting.

When used in conjunction with ATEN's Energy PDUs* and eco DC (Energy & DCIM Management / Web GUI)*, the EC1000 allows you to conveniently upgrade your cabinet with remote energy management functionality to make your server room go green quickly and cost-effectively.

Note: *ATEN series of low cost Energy PDUs (PE1216 / PE1324) and Energy & DCIM Management Web GUI – eco DC

are available at www.aten.com.

Features

- Operation
- Space saving 1U rack mounting with front and rear mounting
- 4 RJ-45 Energy Sensor Ports to monitor four Energy PDU currents (0A to 32A per port)
- 4 RJ-11 Environment Sensor Ports to monitor temperature, humidity, and differential pressure*
- Maximum Amperage Monitor 32A@100V~240V (Energy Box)
- 3 digit 7 segment front panel LED displays current / sensor / IP address information
- Threshold monitoring for:
 - 1.Current
 - 2.Temperature*
 - 3.Humidity*
 - 4.Differential pressure*
- Threshold alerting through:
 - 1. Local: audible alarm and LED lights
 - 2. Remote: SMTP / SNMP trap / Syslog

Management

- Front panel LED indicators for current, temperature*, humidity*, differential pressure*, and IP address information at the Energy Box
- Remote real-time current, temperature*, humidity*, and differential pressure* monitoring and management
- Management through eco DC (Energy & DCIM Management / Web GUI) or 3rd party SNMP manager
- · Supports name assignment for individual Energy PDUs
- Event Logging 128 line event log
- Syslog support
- F/W upgradable

Remote Access

- Remote management via TCP / IP using built in 10 / 100Mbps Ethernet port
- · Management via built in browser based GUI
- Network Interfaces: TCP / IP, UDP, HTTP, HTTPS, SSL, SMTP, DHCP, NTP, DNS, 10Base-T / 100Base-TX, auto sense, Ping
- Supports SNMP Manager V1, V2, V3

Security

- Strong security features include password protection and advanced encryption technologies utilizing 128 bit SSL
- · RADIUS authorization and authentication

Note: * Requires external sensors

Specification

Energy PDU Connections	4
Port Selection	Pushbutton
Connectors	
Energy Sensor Port	4 x RJ-45 Female
Environment Sensor Ports	4 x RJ-11 Female
Power	1 x DC Jack
LAN Ports	1 x RJ-45 Female
Switches	
Reset	1 x Semi-recessed Pushbutton
Selection	1 x Selection Pushbutton
LEDs	
PDU Status	4 (Orange)

Environment Sensor Status	4 (Green)
Selected	1 digit 7-segment (Orange)
Power	1 (Blue)
Link	1 (Orange/Green) 1 (Green)
Monitoring Range	100–240V, 50/60Hz, 0A to 32A(per port) LED Display Resolution: 0.1A Precision: ±0.1A@0 ~ 1A, ±1% >1A
Power Consumption	DC5V:2.93W:14BTU/h
	Note: The measurement in Watts indicates the typical power consumption of the device with no external loading. The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0-50°C
Storage Temperature	-20-60°C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.59 kg (1.3 lb)
Dimensions (L x W x H)	20.00 x 7.59 x 4.40 cm (7.87 x 2.99 x 1.73 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

