

# SM BAT – EnergyMaster™

Site Monitoring  
for Business-Critical Continuity™

## Monitoring

### Features and Benefits

- Lower maintenance cost related to battery backup
- Higher availability thanks to automated battery backup test, detailed information and alarms from the battery backup

## Description

The Supervision Module for Batteries (SM BAT) provides detailed information and alarms regarding the battery backup condition at the telecom site. Based on this information, site visits and maintenance related to the battery backup can be optimized to save both time and money, especially for sites located remotely.

The SM BAT is an easy-to-install monitoring device connected to the advanced control unit (ACU) of the DC power system, and the battery backup it supervises. It is designed for measuring cell/block voltages, battery current and battery temperature.

The information and alarms, regarding the battery backup on a specific site, can be monitored or checked by means of a simple web browser or specific management software. No additional software is needed and login to monitor the site is password protected. (Examples of alarms provided by means of the control unit of the power system is specified in the datasheet and/or manual for the specific unit.)



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## Technical Specifications, SM BAT

### General

Power Supply	18-60 VDC
Power Consumption	5W
Temperature Range	0°C to +60°C / 32°F to +140°F
EMC	EN 300 386; class B, FCC part 15 class B
Safety	IEC 60950, EN 60950, UL 60950
Approvals	CE, UL and designed to meet NEBS level 3

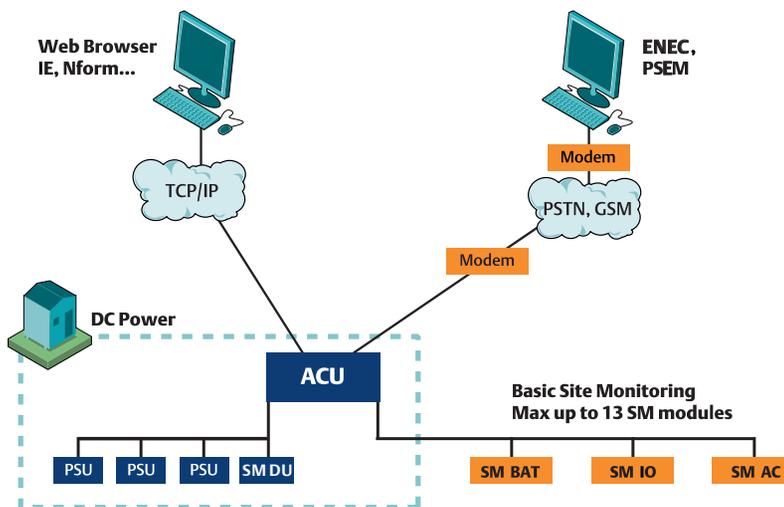
### Mechanical Data

Dimensions (H × W × D)	150 × 300 × 43 mm / 5.9 × 11.8 × 1.7 inch
Standard Installation Methods	Rack and wall mounted
Weight	< 2 kg / 4.4 lbs

### Inputs/Outputs

External Communication	RS232 / RS485
<b>Digital Inputs</b>	
8 Digital Inputs	Alarms/Events
<b>Analog Inputs</b>	
25 Analog Inputs	0-14.5 V < 0.5% for cell/block voltages
2 Analog Input	0-75 V < 0.5% for total battery voltage
5 Analog Inputs	0-75 V < 0.5%, 0-20mA < 0.5%, 0-100mV < 1%, 1uA/K < 2% configurable
<b>Digital Outputs</b>	
2 Relay Outputs	24VDC / 250VAC, 5A

### System Layout



## ABBREVIATIONS

PSTN	Public Switched Telephone Network, an ordinary telephone line
IE	Internet Explorer
ENEC	EnergyMaster™ Emerson Network Energy Center, multi-platform, multi-user, distributed multi-language web environment for monitoring of Emerson Network Power DC, HPAC and UPS equipment
PSEM	Power Supply and Environment Monitoring system
ACU	Advanced Control Unit
PSU	Power Supply Unit (AC/DC converter/rectifier)
SM DU	Supervision Module for additional alarms in extension cabinets
SM AC	Supervision Module for Alternating Current
SM BAT	Supervision Module for Battery Backup
SM IO	Supervision Module for generic monitoring

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