

## Monitoring

### Features and Benefits

- Lower maintenance cost related to AC units
- Higher availability thanks to automated standby alternator tests and AC alarms

## Description

The Supervision Module for AC (SM AC) provides detailed information and alarms regarding the condition and status of the telecom site's AC supply and backup generator. Based on this information, site visits and maintenance related to the AC and standby generator can be optimized to save both time and money, especially for sites located remotely.

The SM AC is an easy-to-install monitoring device connected to the advanced control unit (ACU) of the DC power system, and the AC units it supervises. It is designed for measuring AC voltages and currents, and providing calculations of powers and total harmonic distortions. SM AC is also designed for remotely testing start-functions of standby generator.

The information and alarms, regarding the AC units 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 are specified in the datasheet and/or manual for the specific unit.)



SM AC – EnergyMaster™

# SM AC – EnergyMaster™

## Technical Specifications, SM AC

### General

Power Supply	18-60 VDC
Power Consumption	6W
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

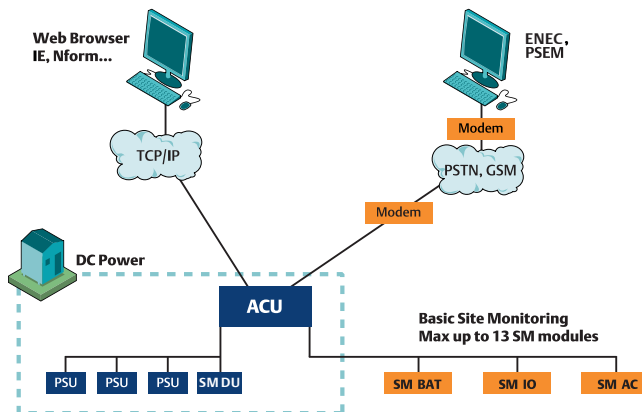
### Mechanical Data

Dimensions (H × W × D)	150 × 400 × 43 mm / 5.9 × 15.7 × 1.7 inch
Standard Installation Methods	Rack and wall mounted
Weight	< 2.7 kg / 5.95 lbs

### Inputs/Outputs

External Communication	RS232 / RS485
<b>Digital Inputs</b>	
12 Digital Inputs	Alarms/Events
<b>Analog Inputs</b>	
3 Mains/Phase Voltage	0-600 VAC, 0-346 VAC
3 Phase Current	0-5 A external current transformer
1 Battery Voltage	0-36 V DC
1 Temperature	-25°C to +80°C / -13°F to +176°F
1 Network Frequency	45-65 Hz
3 Apparent Powers	kVA calculated in software
3 Active Powers	kW calculated in software
3 Reactive Powers	kVA calculated in software
3 Current Distortions	0-100% calculated in software, THD (Total Harmonic Distortion)
Energy	kWh calculated in software
<b>Digital Outputs</b>	
4 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

**Emerson Network Power.**  
The global leader in enabling  
*Business-Critical Continuity™.*

- AC Power
- Connectivity
- DC Power
- Embedded Computing

- Embedded Power
- Infrastructure Management & Monitoring
- Outside Plant
- Power Switching & Controls

- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

www.emersonnetworkpower.com  
www.emersonnetworkpower.com/energysystems  
www.DCpowerefficiency.com

Business-Critical Continuity, Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co.  
©2010 Emerson Electric Co.