Supervisory Module (SM3X)
Smart Power Management

The SM3X range of microcontroller supervisory modules provide the control and monitoring functions for the Enatel RM Series rectifiers, CM Series DC/DC converters and IM Series inverters.

The SM3X monitors all power system conditions including DC voltage, rectifier current, battery current, battery temperature and distribution failure. Visual notifications of alarm conditions are given by LEDs and a 4 line x 16 character alpha numeric LCD, with remote notification being enabled by relay contacts or TCP/IP (using SNMP).
It has a built-in web-based configurator allowing setup of system parameters using a web browser.

The SM3X range utilizes a USB communications port which allows for local monitoring of system operations as well as easy downloading of configuration files for multiple site installations.

KEY FEATURES

- Serial control for up to 168 rectifiers or converters, plus peripheral devices
- Periodic and event logging of up to 16,384 records each
- Multiple language options
- Temperature compensation
- Battery current limiting
- Multiple LVD Control
- Fast charge control and timer
- Web-based configuration
- TCP/IP interface and SNMP for remote monitoring
- USB port for local connection
- Multiple digital and analogue I/O expansion option
- Battery mid-point monitoring

Specifications

DC INPUT	SM33/SM34	SM35/SM36
Rated Voltage:	80–160V DC	16–75V DC
Input Current:	<50mA maximum	<150mA maximum

MONITORING AND CONTROL		
Display:	Multi-lingual alpha-numeric backlit display	
Communications Serial: TCP/IP: Modbus:	1x USB port on front panel for local PC interface Ethernet interface for communication using SNMP protocol v1/v2c/v3 and internal web based configurator Supported via TCP/IP	
LED Indicators Green: Yellow: Red:	Power on/monitor OK Non-urgent alarm Urgent alarm	
Audible:	90dBA buzzer mappable to user-defined conditions	
Controls:	3x push buttons for parameter-setting or viewing on front panel	
Signal Inputs:	Serial bus for rectifier control and interface to peripheral modules, 3x digital inputs, 2x temperature sensors (one fitted by default)	Serial bus for rectifier control and interface to peripheral modules, 6x digital inputs, 2x temperature sensors (one fitted by default)
Alarms:	3x alarm relays, two of which can be mapped for customized alarm settings	6x alarm relays, five of which can be mapped for customized alarm settings
Alarm Contacts:	0.3A 100V volts free changeover contacts	
Logging Capacity:	Periodic log, 16,384 records (dependent on number of parameters logged) Event log, 16,384 records (dependent on number of parameters logged)	
Connections:	Relay outputs, mini combicon to accept 1.5mm² wire USB port, USB mini B	

ENVIRONMENTAL REQUIREMENTS	
Ambient Temperature:	-20ºC to +70ºC (maximum output power is derated above 55ºC)

MECHANICAL		COMPLIANCES	
Dimensions (W, H, D):	111.5mm, 44.0mm (1U), 282.0mm	Safety:	EN60950
Weight:	1.50kg	Other:	CE & RoHS compliant

PART NUMBERS:	
SM33:	Standard monitor featuring full temperature compensation, automated and manual battery testing/equalization
SM34:	Enhanced monitor featuring full temperature compensation, automated and manual battery testing/equalization with TCP/IP
SM35:	Standard monitor featuring full temperature compensation, automated and manual battery testing/equalization
SM36:	Enhanced monitor featuring full temperature compensation, automated and manual battery testing/equalization with TCP/IP

Contact Enatel for datasheets and characterization details. Due to product development, specifications are subject to change without prior notice. Pictures may be representative: actual products may differ.

Join us on

A division of www.enatel.net | sales@enatelenergy.com | Ph: +64-3-366 4550