SM HV SERIES INDUSTRIAL SUPERVISORY MODULES

enatel energy

The SM HV series microcontroller based supervisory modules provide the control and monitoring functions for both the Enatel RM3 HV series rectifiers.

The supervisory module monitors all power system conditions including DC voltage, rectifier current, battery current, battery temperature, and distribution failure. Visual notification of alarm conditions are given by LED's and a 4 line x 16 character alpha numeric display, with remote notification being enabled by relay contacts.

A USB communications port allows for local monitoring of system operations as well as easy downloading of configuration files for multiple site installations.

Option for RS232 or TCP/IP (using SNMP) with a built-in web based configurator allowing setup of system parameters using a web browser.

- *Serial control for up to 126 rectifiers/converters, plus peripheral devices.*
- *Periodic and event logging of up to 16384 records each.*
- *Multiple language options.*
- *Temperature compensation.*
- *Battery current limiting.*
- *Dual LVD Control.*
- *Setup from front panel or PC.*
- *Fast charge control and timer.*
- *LCD display of parameters.*
- *USB port for local connection.*
- *Option for web based configuration, TCP/IP interface and SNMP for remote monitoring.*

MANUFACTURED IN NEW ZEALAND

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DC INPUT

Rated Voltage:	80-160V DC
Input Current:	<50mA maximum

MONITORING & 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 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)
Alarms:		3x alarm relays, 2x of which can be mapped for customised alarm settings
Alarm Contacts:		0.3A 100V volts free changeover contacts (0.15A @ 160V)
Logging Capacity:		Periodic log, 16,384 records (dependant on number of parameters logged) Event log, 16,384 records (dependant on number of parameters logged)
Connections:		Relay outputs, mini combicon to accept 1.5mm² wire USB port, USB mini B

TCP/IP and modbus options only available with SM34 supervisory module.

ENVIRONMENTAL REQUIREMENTS

Ambient Temperature:	-20°C to +70°C (maximum output power is derated above +50°C)
Storage Temperature:	-30°C to +85°C
Humidity:	5-95% RH (non-condensing)
Altitude:	<2,500m at full power

COMPLIANCES

Safety:	EN60950
Immunity:	CISPR24
Emissions:	CISPR22
AC Harmonics:	EN61000-3-2
AC Flicker and Fluctuation:	EN61000-3-3
Other:	CE & RoHS compliant

MECHANICAL

Dimensions W, H, D:	111.5mm, 44.0mm (1U), 282.0mm overall
Weight:	1.5kg

PART NUMBERS

SM33:	Standard monitor featuring full temperature compensation, automated and manual battery testing/equalisation
SM34:	Enhanced monitor featuring full temperature compensation, automated and manual battery testing/equalisation with TCP/IP