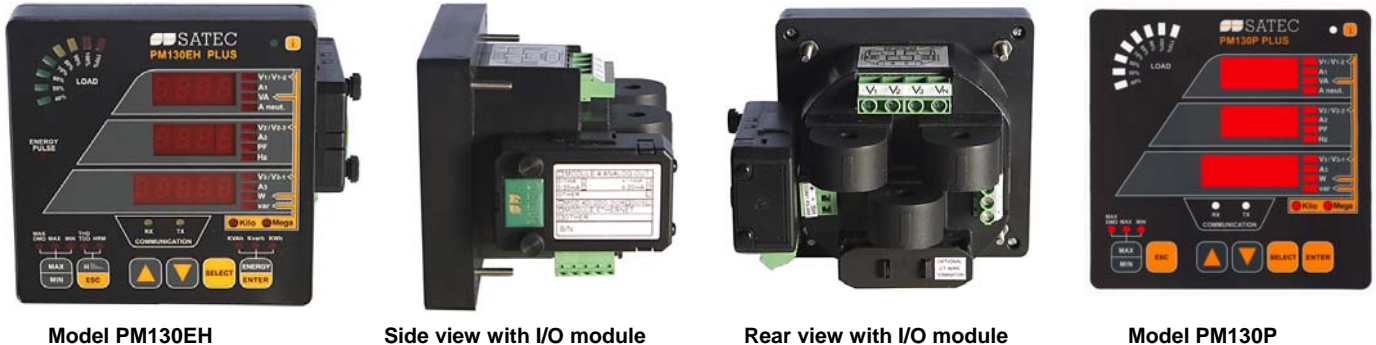


December 2007



Model PM130EH

Side view with I/O module

Rear view with I/O module

Model PM130P

The new SATEC Model PM130Plus Series is the latest generation of panel metering. This device replaces the popular workhorse of the older PM130 Series. Just two models are now offered. A Model PM130P *Plus* Power meter providing basic electrical measurements with Bi-directional Power. A second model PM130EH*Plus* Energy/Harmonics meter is introduced for advanced measurements that include energy, THD and individual harmonics up to the 63<sup>rd</sup>. A new selection of ADD ON modules makes this meter configurable to your immediate needs. The following enhanced key features are provided in the PM130Plus Series list below:

PM130 Plus Series Comparison Guide		
	Present PM130 Series	Enhanced PM130 Plus
<b>Models</b>	PM130 Basic: PM130P Power, PM130E Energy and PM130EH Energy/Harmonic	Two (2) Models <b>PM130P Plus</b> Power & <b>PM130EH Plus</b> Energy/Harmonic
<b>Firmware</b>	EEPROM – Must be removed from panel	Flash Update – via communication. No need to remove from panel or power down
<b>Accuracy</b>	Non Revenue Class 0.5 Energy	Revenue Class 0.2 Energy
<b>Max Current</b>	150% over range (7.5 Amps Max)	200% over range (10 Amps Max)
<b>Communications</b>	Fixed RS485 Serial port	Adds optional Ethernet COM 2 TCP/IP MODBUS/DNP30/IP
<b>Kilo/Mega label</b>	Model Specific – Front panel labeled Kilo or Mega	Auto Ranging LED – Kilo/Mega LED indicator
<b>Information LED</b>	N/A	Notifies when loss of power occurred and RTC reset
<b>Communication LED</b>	N/A	Transmit & Receive LED indicator for RS485
<b>Relay Output</b>	One Form A contact	Optional Add on I/O module. Includes Two (2) Form A Contacts
<b>Digital Inputs</b>	N/A	Optional Add on I/O module. Includes Four (4) Breaker Status Inputs
<b>Analog Output Option</b>	N/A	Optional Add on I/O module. Four (4) Analog Outputs. Choice of 4-20 ma; 0±1ma; or 0-20 ma
<b>Real Time Clock (RTC)</b>	N/A	Includes RTC. Used for date/time stamping of Max/Min values including demands
<b>Power Supply</b>	1AC, 2AC and Optional Universal 125V AC/DC power supply	Standard Universal 125V AC/DC. Options for 12, 24 / 48V DC
<b>Frequency (HZ)</b>	Fixed at 50Hz or 60Hz	Settable to 25 Hz, 50 Hz, 60 Hz or 400 Hz
<b>Total Harmonic Distortion (THD)</b>	(EH Model) THD & TDD per phase only	(EH model) Includes THD, TDD per phase. Individual up to 63rd with direction
<b>Decimal Point</b>	N/A	Two decimal places are provided for voltage & current values for precise measurements
<b>RT Waveform &amp; Phasor display</b>	N/A	(Via PAS software) Allows for wiring verification and scope type viewing of quality of waveforms



Optional field installable plug in modules



**PM-130 PLUS TrueMeter Series**

PM130P - Plus -  
PM130EH - Plus -



**CALIBRATION AT**

- 25Hz Calibration at 25 Hz
- 50Hz Calibration at 50 Hz
- 60Hz Calibration at 60 Hz
- 400Hz Calibration at 400 Hz

**CURRENT INPUT**

- 5 Amperes
- 1 Amperes

**POWER SUPPLY**

- ACDC Universal (standard) 85-285V AC / 85-290V DC
- 1DC 12 VDC (9.5-18V DC)
- 23DC 24/48 VDC (18.5-72v DC)
- 4AC 480V AC Line powered +/- 10%

I/O or COM2 MODULES - *Maximum 1 module per meter*

**ANALOG OUTPUT MODULE (4CH)**

- A01 +/- 1mA
- A02 0-20 mA
- A03 0-1 mA
- A04 4-20 mA

OR

**INPUT/OUTPUT MODULE (4DI & 2RO)**

- R Relay Output (2 Form A) 250VAC/5A
- S Solid State (2 Form A) 250VAC/400VDC 0.15A

OR

**COM2 COMMUNICATION**

- ETH Ethernet (TCP/IP) RJ45
- PRO PROFIBUS

EXAMPLE PM130PPlus-60Hz-5-ACDC-A01

OR

PM130EHPlus-50Hz-5-ACDC-ETH

**Models & Measurement**

Measurements	PM130 Plus	
	P	EH
Voltage L- L per Phase	v	v
Voltage L- N per Phase	v	v
Current per Phase	v	v
Neutral Current	v	v
Frequency	v	v
Phase Rotation	v	v
Min/Max volts per Phase	v	v
Max Amp Demand per Phase	v	v
Relay & DI Status	v	v
Counters	v	v
TxD, RxD Comm Status	v	v
Alarm Trigger Code	v	v
PF per Phase & Total	v	v
kW per Phase & Total	v	v
kVAR per Phase & Total	v	v
kVA per Phase & Total	v	v
Voltage Unbalance	v	v
Current Unbalance	v	v
Min/Max Amps Per Phase	v	v
Min/Max Neut Current	v	v
Min/Max Frequency	v	v
Min/Max kW, KVAR, kVA	v	v
Max Volt/Amp Demand per Phase	v	v
Max kW/kVAR/kVA Demand	v	v
Import/Export kWh, kVARh & kVAh		v
% THD per Phase Volts		v
% THD per Phase Amps		v
% TDD per Phase		v
Individual Harmonic up to 63 <sup>rd</sup>		v
Displacement PF		v
Fundamental kW		v