

SINGLE PHASE ENERGY METER



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FEATURES



HIGH PROTECTION
Using ultrasonic welding.



UV TREATED COVER
Ensures protection from thermal stresses and sunlight.



LOW INTERNAL LOSSES
Design to consume less wattage.



COMMUNICATION
Optical port, RS 232/RS 485, LCD as well as stepper motor counter display.



IEC 61036 : 2000
Conforms to International standards.



TEMPER FREE
Design to capture abnormalities induced by customer.



SPECIFICATIONS

Applicable standards:

National	:	IS 13779-1999
International	:	IEC 61036-2000
Meter type	:	Single phase 2 wire
Accuracy	:	Class 1
Ref voltage	:	240 V ac (+ 20% - 40%)
Rated current	:	Basic (Ib): 5, 10, 2.5 Amp. I _{max} : 10, 20, 30, 40, 60 Amp
Frequency	:	50 Hz.
Power factor	:	Zero lag Unity Zero lead
Operating temp	:	-25° C to 70° C
Humidity	:	99 % RH at 40° C
Start current	:	0.2 % I _b at ref. voltage.
No load	:	At 115% of ref voltage, register one pulse in 20 x time taken in start current.
Power consumption	:	< 8 VA in voltage circuit (at ref. Voltage & current). < 1 VA in current circuit (at ref. current).

FEATURES

FUNCTIONAL LED INDICATIONS

Calibration.
 Phase available.
 Current reversal.
 Load through earth.
 Neutral Missing

ANTI TAMPER FEATURES: Meter will register energy in the following conditions:

Phase and neutral wires are interchanged.
 Input and output wires are interchanged.
 Neutral wire is removed at the input or output and the load is connected to earth.
 Load is connected to neutral as well as partial earth through a resistance
 Immune to external magnetic interface.
 Meter will not saturate on passing DC.
 Top cover open tamper.

DISPLAY TYPE

7 Segments LCD, Back Light, Digits height 7-8 mm. Display 7 digits with one decimal.

Display Parameters

Continuous run : Cumulative Energy (KWh) and Instantaneous Load (KW).

Scroll mode : Auto mode (10 sec per parameter) / manual mode (push button) scroll to display the following parameters:

Real time and date.
 Current month & Previous six month cumulative Energy (KWh).
 Max. Demand KW for Previous six month.
 Instantaneous voltage (Vac).
 Instantaneous current (Amps).
 Instantaneous power factor.
 Instantaneous frequency (Hz).
 Can be programmed for any other customer specific requirement.

BILLING DATA

Meter serial number.
 Download real Time and date.
 Cumulative Energy (KWh) history of 6 months.
 MD (KW) history of 6 months.
 Tamper data save last 6 months.
 60 days load profile (KWh, KVAh & P. F.).
 Can be programmed for any other customer specific requirement.

Communication : RS232 interface / RS485.

Battery backup : If required (2 to 48 hrs.) to display the stored parameters.

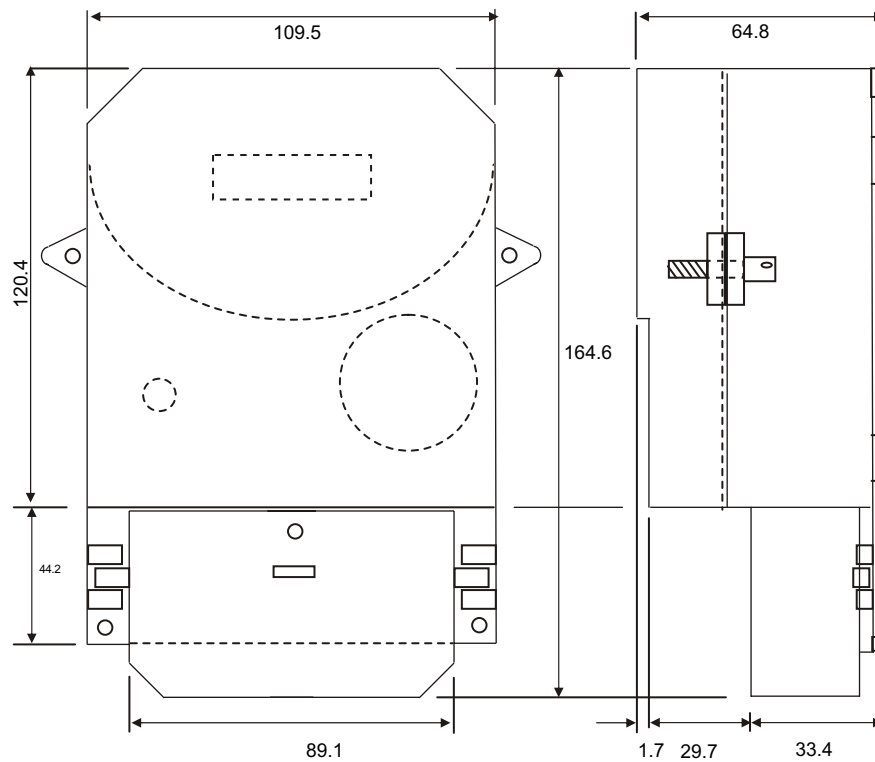
Field programming : field programmable (Optional).

ENCLOSURE

Dust and moisture proof. : IP 51
 Material : Polycarbonate.
 Sealing provision : Two sealing screws for meter cover, one screw for terminal cover and

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DIMENSIONS



PQVGU<"
 DRAWING NOT TO SCALE.
 ALL DIMENCTIONS ARE IN MM.
 GENERAL TOLERANCE : +/-2mm
 DRAWING IS SUBJECT TO CHANGE WITHOUT NOTICE FOR DESIGN IMPROVEMENTS.

FEATURES

Indo Asian Model number system: The model number of each meter will consist of 23 digits. For separator dashes are included in these 23 digits. The explanation of digits is as under:

Type of meter		Data Retrieval	
Single phase		Not available	NA
SP		Available through IR port	
Three phase	TP	IR	
Display		Available through hard wire port	
LCD	LCD	HW	
Stepper Motor	SMC	Available through IR and hard wire port	
Current Rating		IH	
5-20 A	0520	Available through AMR PLCC	PL
5-30 A	0530	Available through AMR net	IN
10-40 A	1040	Available through AMR GSM	GS
10-60 A	1060	Battery backup	
xx-yy A	xyyy	Available	
Neutral Missing anti temper feature		BB	
Available		Not available	NB

Example:SP-LCD-0530-NM-IR-BB-CO

Energy meter of Single phase with LCD display of rating 5-30A with neutral missing anti temper feature capable of data retrieval by IR port and having battery backup and post payment conventional billing