



LCD Meter

Features:

- ▶ Site Programmable CT and PT ratio
- ▶ True RMS measurement
- ▶ Password protection
- ▶ Optional features
- ▶ Maximum demand with relay contact (COM / NO)
- ▶ RS 485 computer interface
- ▶ 60A direct current CT module available
- ▶ Harmonic measurement (THDV, THDI)
- ▶ Autoranging
- ▶ Universal Auxiliary supply

Advantages:

- ▶ To caution on the Extra Energy Consumption
- ▶ To identify inefficiency of Machine/Man
- ▶ Reduce Panel Space, Wiring, Installation Time

Applications:

- ▶ Control Panel
- ▶ Distribution System
- ▶ Generator sets
- ▶ Motor Control
- ▶ Test Bench
- ▶ Energy Management
- ▶ Process Control & SCADA

Measuring Parameters

- ▶ V_{L-L} (Individual)
- ▶ V_{L-N} (Individual)
- ▶ Current (Individual)
- ▶ Neutral Current
- ▶ Power factor (Individual)
- ▶ Phasor angle
- ▶ Frequency
- ▶ Power: (Active, Reactive and Apparent)
- ▶ Maximum Demand: (kW, kVA)
- ▶ Peak maximum Demand: (kW, kVA)
- ▶ Energy (Active, Reactive inductive, Reactive capacitive, Apparent)
- ▶ Run hour (Import, Export and Total)

Supply Voltage

Auxiliary supply	90-270 V AC/DC
Frequency	50/60 Hz

LCD Display

Display	3 rows of 4 digits (For parameter) 1 row of 8 digits for Energy LCD display
Digit Height	0.26 IN (6.75mm)
Display Scrolling	Automatic/Manual

Settable Parameters

C.T. Primary	1/5A to 10000A (Programmable)
C.T. Secondary	1/5A (Programmable)
P.T. Ratio	Programmable upto 500 kV
Display Reset	Energy

Output Specification

Communication	RS485 (Optional)
Relay Output	1 Relay Output (COM/NO)

Input Specifications

Electrical Connectio	:3Ø-4 wire/3Ø-3 wire
Input Voltage Range	:10-500 VAC (L-L)/10-300V (L-N)
Input Current Range	:0.005-6A AC Direct 60A optional
Frequency	:45-65 Hz
Resolution	▶ Energy 0.1 kWh ▶ Power factor: 0.001 ▶ Frequency: 0.01 Hz ▶ Voltage: Autoranging ▶ Current: Autoranging ▶ Power: Autoranging
Accuracy	▶ Voltage $\pm 0.5\%$ of F.S. ▶ Current $\pm 0.5\%$ of F.S. ▶ Power Factor $\pm 0.5\%$ of F.S. ▶ Frequency $\pm 0.1\%$ of F.S. ▶ Power (Active & Apparent) Class - 0.5 ▶ Power (Reactive) class - 2.0 ▶ Energy (Active & Apparent) Class 0.5s (Class 0.5s as per IEC 62053-22 at 5A nominal (for 1A nominal when I > 0.15A)) ▶ Energy (Reactive) Class 2 (Class 2 as per IEC 62053-23 at 5A nominal (for 1A nominal when I > 0.15 A))
Burden	:voltage: 0.2 VA max. per input Current: 0.2 VA max. per input Aux. supply: 3 VA max.

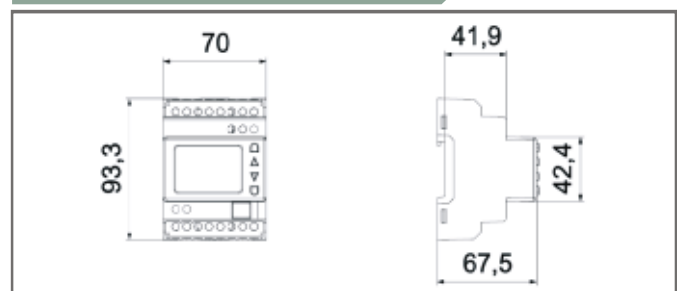
Environmental Specifications

Temperature	Operating : -10° to 55°C Storage : -20° to 75°C
Humidity	< 95% RH

Mechanical Specifications

Mounting	Din Rail
Weight	280 g
Enclosure Material	ABS Thermoplastic

Dimension



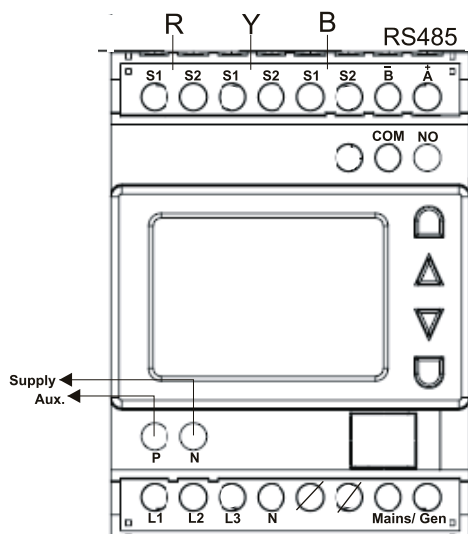
Applicable Standards

Radio Interference Suppression	CISPR22
Fast Transient Burst Test	IEC61000-4.4
Damped Oscillatory Waves Immunity Test	IEC61000-4.12
Test of Immunity to Electromagnetic RF Fields	IEC61000-4.3
Test of Immunity to Conducted Disturbances, Induced by Radio-Frequency Fields	IEC61000-4.6
Test of Immunity to Electrostatic Discharges	IEC61000-4.2
Surge Immunity Test	IEC61000-4.5
Test of Protection Against Penetration of Dust & Water	IEC60529

Safety Standards



Safety Standard	IEC61010-1
Pollution Degree	II
Installation Category	III
High Voltage Test	2 kV AC, 50Hz for 1 Minute Between Aux. & Measuring Inputs

Connection Diagram



Ordering Information

Ordering Code	Current Rating	Comm. RS485
VIPS 70LD	0-5A, CT Programmable	
VIPS 70LD-60A-1P-M	0-60A, external CT for 1 phase (M)	
VIPS 70LD-60A-1P-N	0-60A, external CT for 1 phase (N)	
VIPS 70LD-60A-1P-NX.X	0-60A, external CT for 1 phase (NX.X)	
VIPS 70LD-60A-3P-M	0-60A, external CT for 3 phase (M)	
VIPS 70LD-60A-3P-N	0-60A, external CT for 3 phase (N)	
VIPS 70LD-60A-3P-NX.X	0-60A, external CT for 3 phase (NX.X)	
VIPS 70LD-C	0-5A, CT Programmable	/
VIPS 70LD-60A-1P-M-C	0-60A, external CT for 1 phase (M)	/
VIPS 70LD-60A-1P-N-C	0-60A, external CT for 1 phase (N)	/
VIPS 70LD-60A-1P-NX.X-C	0-60A, external CT for 1 phase (NX.X)	/
VIPS 70LD-60A-3P-M-C	0-60A, external CT for 3 phase (M)	/
VIPS 70LD-60A-3P-N-C	0-60A, external CT for 3 phase (N)	/
VIPS 70LD-60A-3P-NX.X-C	0-60A, external CT for 3 phase (NX.X)	/

Accessories		
Description	Code	Photo
for external CT of 60A programmed for single phase	60A-1P	
for external CT of 60A programmed for three phase	60A-3P	

Preference of Accessories

The above module to be mounted behind the meter	M
The above module to be supplied with 1 meter long Leads	N
The above module to be supplied with long leads (any length on request) *Where X.X is length to be specified for eg. 2.5	NX.X