

Multi Function Meter



HIGH ACCURACY



EASY TO INSTALL

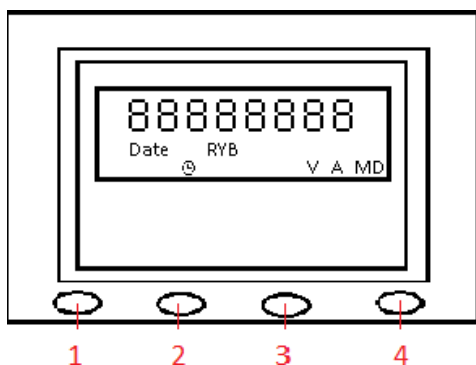


HIGH PERFORMANCE



ENERGY AUDITING

Front Panel Details



KEYS	OPERATIONS
1.Mode/Set	To edit and enter the parameter values
2.Up	To view previous parameter/increment value
3.Next	To view next parameter/select the digit
4.Scroll/Esc	To stop & view and scroll & exit the Parameter

SETTING PARAMETERS	
Meter ID	Time (RTC)
Baud Rate (9600/19200/38400)	Date
PT Primary ratio	MD Reset (rst)
PT Secondary ratio	Energy Reset (Ergy rst)
CT Primary ratio	MD set
CT Secondary ratio	Password set (PD)

Caution:



Do not open/touch the terminals when power ON,
Do not open the CT terminals when Load ON,
Use U type connector at terminals.
Ensure isolation of cables to avoid short circuit.

Multi Function Meter

Features

- ♦ **OLV301** meter is an ideal replacement for three phase Analog meters. Used for standalone metering in panels
- ♦ It can monitor most electrical parameters.
- ♦ **OLV301** multifunction meter with true RMS 4quad measurement.
- ♦ This Ensures high accuracy
- ♦ Attain class 0.5s. Certified with std. labs for forward cumulative energy Measurement.

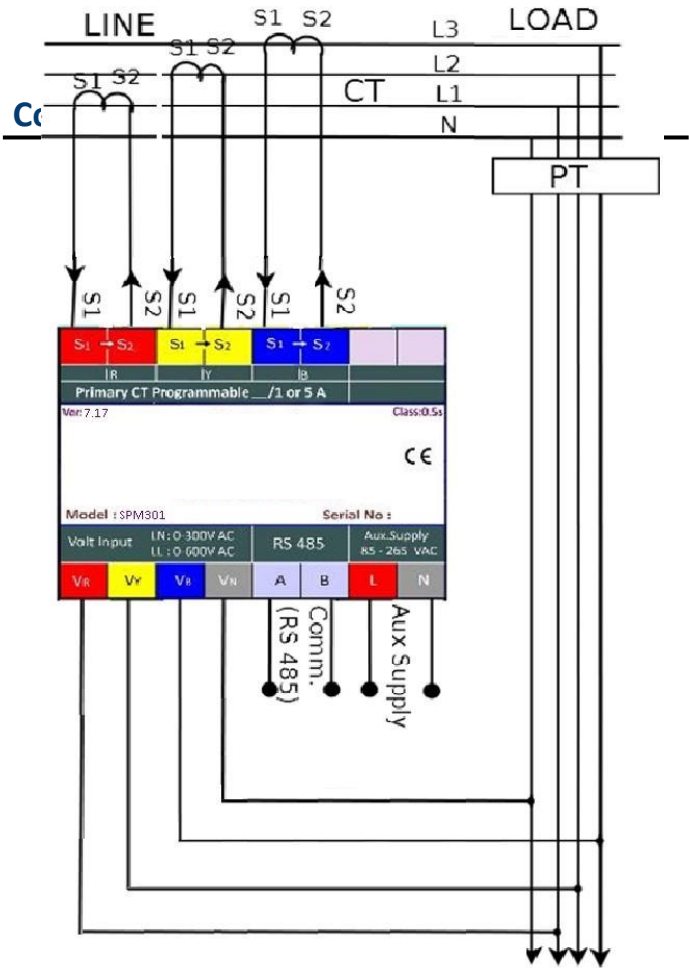
Back Terminal Details

1	2	3	4	5	6		
S1	S2	S1	S2	S1	S2		
R-PHASE	Y-PHASE	B-PHASE					
							85-265V AC
LL: 0-600V	LN: 0-300V	RS485				AUX	
Vr	Vy	Vb	Vn	A	B	L	N
7	8	9	10	11	12	13	14

TERMINAL	DESCRIPTON
1	S1 of R phase CT
2	S2 of R phase CT
3	S1 of Y phase CT
4	S2 of Y phase CT
5	S1 of B phase CT
6	S2 of B phase CT
7	R phase Direct (or) Through PT
8	Y phase Direct (or) Through PT
9	B phase Direct (or) Through PT
10	Neutral Direct (or) Through PT
11	RS485(A) - communication
12	RS485(B) - communication
13	Auxiliary Supply (85-265 VAC) Phase
14	Auxiliary Supply (85-265 VAC) Neutral

Multi Function Meter

Connection Details



Multi Function Meter

Technical Specification

Auxiliary Supply	85-265VAC
Voltage PT	Primary side - Programmable
	Secondary side - 110 to 440 V
Current CT	Primary side - 60A
Starting Current	10mA
Power Factor	Four Quadrant
Frequency	45-65Hz
Communication	RS485 with MODBUS RTU
Temperature	Operation (-10 to 55)°C
	Storage (-20 to 70)°C
Dimension	96 x 96 x 48 mm
Panel Cut out	Range of 92 x 92 mm (±0.5mm)
Mounting	Panel mountable
Connector Type	Screw type terminal
Weight	350gms
System type	3Phase 4 wire system
Input Voltage	3*240 VAC
Resolution	0.01 for combined kWh and kVAh
Display	LCD 1 row display

User Programmable

- Meter ID (0-255)

Applications

- Power Distribution Panel
- EB/DG Panel
- Energy Auditing Solution
- MV/LV Panels
- EA solutions
- Telecom Tower (BTS) monitoring
- Sub station monitoring

Multi Function Meter

Measurement Accuracy

Parameter	Accuracy
Reactive power kVAR per phase	0.6
Apparent power kVA per phase	0.5
Active energy kWh import/export	0.5
Reactive energy (kVARh) &(Lead/Lag)	0.6
Apparent energy (kVAh)	0.5

Communication settings

Communication Protocol	
Baud Rate	9600
Data Bit	8
Priority	None
Stop Bit	1

Data Type: 32 bit float for all parameter

Data format: Direct reading ,no scaling is required

Memory Mapping

Address	Parameters	Word	Resolution
0	R Phase voltage	2	0.001
2	Y Phase Voltage	2	0.001
4	B Phase voltage	2	0.001
6	R Phase Current	2	0.001
8	Y Phase Current	2	0.001
10	B Phase Current	2	0.001
12	Power Factor R Phase	2	0.001
14	Power Factor Y Phase	2	0.001
16	Power Factor B Phase	2	0.001
18	R Phase Active Power	2	0.001
20	Y Phase Active Power	2	0.001
22	B Phase Active Power	2	0.001
24	R Phase Reactive Power	2	0.001
26	Y Phase Reactive Power	2	0.001
28	B Phase Reactive Power	2	0.001
30	R Phase Apparent Power	2	0.001

Multi Function Meter

Memory Mapping Contd...

Address	Parameters	Word	Resolution
32	Y Phase Apparent Power	2	0.001
34	B Phase Apparent Power	2	0.001
36	Total Active Power	2	0.001
38	Total Reactive Power	2	0.001
40	Total Apparent Power	2	0.001
42	Total Power Factor	2	0.001
44	Line Frequency	2	0.001
48	RY Voltage (LL)	2	0.001
50	YB Voltage (LL)	2	0.001
52	RB Voltage (LL)	2	0.001
54	Rising Demand-EB	2	0.01
58	Maximum Demand-EB	2	0.01
78	Power on hrs – EB	2	Hr:Mi:Sc
84	Load on hrs – EB	2	Hr:Mi:Sc
103	Avg Voltage	2	0.001
105	Avg Current	2	0.001
200	Cum. Energy – Forward KVAh	2	0.01
202	Cum. Energy – Forward kWh	2	0.01
204	Cum. Energy – Forward KVARh lag	2	0.01
206	Cum-Energy – Forward KVARh lead	2	0.01
248	Average Power Factor	2	0.01
For Write parameters :(Function 6, 16)			
400	Real Time & date	3	HH:MM; DD-MM-YY
403	Meter ID	1	
404	PT Primary	1	
405	PT Secondary	1	
406	CT Primary	1	
407	CT Secondary	1	
416	MD in KW/KVA 1= KVA, 0=Kw	1	1
417	MD Rst-EB (write with 0 s)	1	1
612	Baud rate		

Multi Function Meter

Display Parameters

(Every parameter has LCD indications for easy access)

Parameter
Real Time Clock (RTC)
Date
Meter ID
Phase Sequence
Frequency
Cumulative-RYB-Active Energy (kWh)
Cumulative-RYB-Apparent Energy (kVAh)
Cumulative-RYB-Reactive Energy (kVArh) I lag
Cumulative-RYB-Reactive Energy (kVArh) I lead
Combined PF (RYB)
Power ON hour
Load ON hour
Voltage L-N (R, Y, B), AVG voltage
Voltage L-L (RY, YB, BR)
Current Phase Wise (R, Y, B), AVG current
Power Factor (R,Y,B), AVG power factor
Instant-Active Power kW (R, Y, B), Instant- Total Active Power kW (RYB)
Instant-Reactive Power kVAr (R, Y, B), Instant- Total Reactive Power kVAr (RYB)
Instant-Apparent Power kVA (R, Y, B), Instant- Total Apparent Power kVA (RYB),
Rising Demand
Maximum Demand
Voltage (Total Harmonic distortion)
Current (Total Harmonic distortion)

Multi Function Meter

Our Other Products



- ◆ EMS, BMS, Water, Electricity Billing,
- ◆ Energy Audit Solutions,
- ◆ Retail Energy Saver Solutions,
- ◆ Water Metering Solutions,
- ◆ Smart Street Light & Metering Solutions,
- ◆ Wireless Calling Solutions (NCS).