



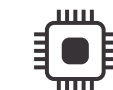
**SMP72x14445SN**  
Voltmeter - TRMS



**SMP72x14445SN**  
Voltmeter - DC



**SMP14445SN**  
Voltmeter - DC



Micro  
Controller  
Based

## Features

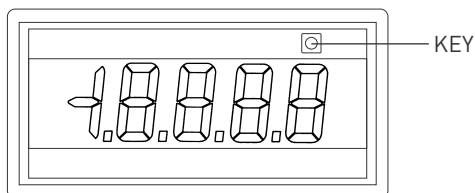
- High Accuracy Across the Entire Range
- User Programmable Display (CT Primary / PTR / Shunt Value)
- 19999 Count (Max) High Resolution Display
- Auto Selection of Decimal Point
- RS485 Port, 5KV Isolated with Modbus RTU Protocol (Optional)

## Specifications

- |                                |  |                                   |   |
|--------------------------------|--|-----------------------------------|---|
| ● <b>Measuring Method</b>      | TRMS Using Microcontroller                                       | ● <b>VA Burden (Typical)</b>      | Auxiliary : ≤ 1.5VA<br>Voltage Input : ≤ 1VA<br>Current Input : ≤ 0.5VA                               |
| ● <b>Display Type</b>          | 1" / 25.4mm Red LED Super Bright Display                         | ● <b>Environmental Conditions</b> | 0°C to + 55°C, < 70% RH (Operation)<br>-10°C to + 70°C, < 70% RH (Storage)<br>27°C ±5°C (Calibration) |
| ● <b>Maximum Display</b>       | 4½ Digit / 19999 (Max.) Counts                                   | ● <b>Dielectric Strength</b>      | 2.5KV @ 50Hz for 1 Minute between<br>Input - Auxiliary & Case -Terminals                              |
| ● <b>Display Stability</b>     | Within ±2 Digit  | ● <b>Impulse Withstand</b>        | 3.5KV, 1.2 / 50 Micro Second  |
| ● <b>Resolution</b>            | 0.0001 to 1 Count Depending on<br>Range / Scale Display          | ● <b>Case / Housing Material</b>  | Polycarbonate, Black  |
| ● <b>Over Load Indication</b>  | "-OL-"   | ● <b>Faceplate / Lens</b>         | Polycarbonate Transparent Red   |
| ● <b>Under Load Indication</b> | NA   | ● <b>Connectors / Terminal</b>    | Nylon 66, 33% GF, Black / Brass   |
| ● <b>Sampling Rate</b>         | 3 Samples / Second   | ● <b>Mounting Clamps</b>          | Sturdy, Moulded Derlin with Suitable<br>Hardware  |
| ● <b>Maximum Overload</b>      | Voltage : 1.2 Times Continuous<br>Current : 1.2 Times Continuous |                                   |   |
| ● <b>Frequency Response</b>    | 40 - 400Hz   |                                   |   |
| ● <b>Polarity Indication</b>   | "-" is Indicated for Negative Input                              |                                   |   |

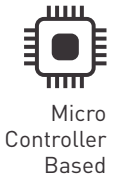
Model	Input	Range (Any One Only)	Programmable Display Key	Aux Supply (Any One Only)	Accuracy	
SMP72x14445SN / SMP14445SN	DC	mV	0 - 75 (Shunt Operated)	✓[*]	85-265V AC / DC @ 50 / 60Hz OR 19-90V AC/DC @ 50 / 60Hz (Optional)	± 0.5% of FSD
			0 - 200	-		
		V	0 - 2, 20, 200	-		
			0 - 1000	-		
	AC	mA	0 - 2, 20, 200	-		
			A	0 - 2, 5		
		V	0 - 110 (PT Operated)	✓[#]		
			0 - 2, 20, 200, 750	-		
I	0 - 1 (CT Operated)	✓[*]				
	0 - 5 (CT Operated)	✓[*]				

**Standard :** As per IS 13875



### For Setting CTP / Shunt / PTR

- Power on DPM
- Remove Front Facia
- Press Key on Display Card once
- Meter will Show Present Set Display Value
- Press-Release until the Desired Value is Displayed



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**# User Programmable PTR Display Value (Using Key)**

Sr.	Ratio	PTR (KV AC)
1	1	0.110
2	3.77	0.415
3	4	0.440
4	20	2.200

Sr.	Ratio	PTR (KV AC)
5	30	3.300
6	60	6.600
7	100	11.00
8	200	22.00

Sr.	Ratio	PTR (KV AC)
9	300	33.00
10	600	66.00
11	1000	110.0
12	1200	132.0

Sr.	Ratio	PTR (KV AC)
13	2000	220.0
14	4000	440.0
-	-	-
-	-	-

**\* User Programmable CT Primary / Shunt Display Value (Using Key)**

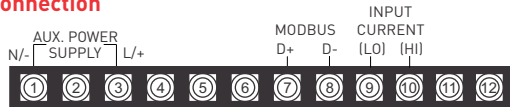
CT Primary / Shunt Display Value							
1	30	80	250	600	1500	5000	10000
5	40	100	300	700	1600	6000	12000
10	50	125	350	750	2000	7000	15000
15	60	150	400	800	2500	7500	20000
20	70	175	450	1000	3000	8000	-
25	75	200	500	1200	4000	9000	-

**Dimensions (mm)**

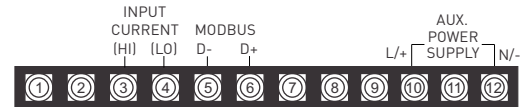
Model	SMP72x14445SN	SMP14445SN
Front	72 x 144	144 x 144
Depth (Behind Bezel)	93	72
Panel Cut-Out	68 <sup>(+0.8, -0.0)</sup> x 138 <sup>(+0.8, -0.0)</sup>	138 <sup>(+0.8, -0.0)</sup> x 138 <sup>(+0.8, -0.0)</sup>

**Ordering Information :** Model, Input Range, CTR / PTR / SHUNT (if any), Scale Display, Auxiliary Supply & RS 485 Modbus Communication (Optional).

**Terminal Connection**



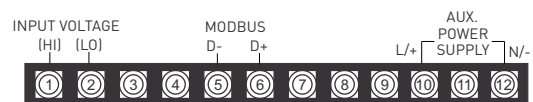
SMP72x14445SN - Ammeter (CT Operated)



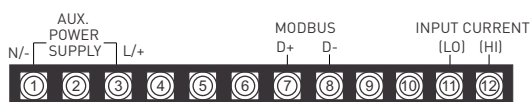
SMP14445SN - Ammeter (CT Operated)



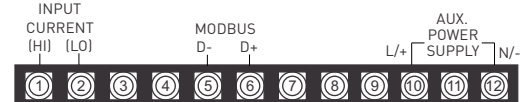
SMP72x14445SN - Voltmeter / PT Operated



SMP14445SN - Voltmeter / PT Operated



SMP72x14445SN - Ammeter (Shunt Operated) / Ammeter (Direct Measurement)



SMP14445SN - Ammeter (Shunt Operated) / Ammeter (Direct Measurement)