



VERITEK

# DC METERS



DC VOLTMETER (96x96)  
VIPS 91D



DC AMMETER (96x96)  
VIPS 92D



DC VOLTMETER (96x48)  
VIPS 91PD



DC AMMETER (96x48)  
VIPS 92PD

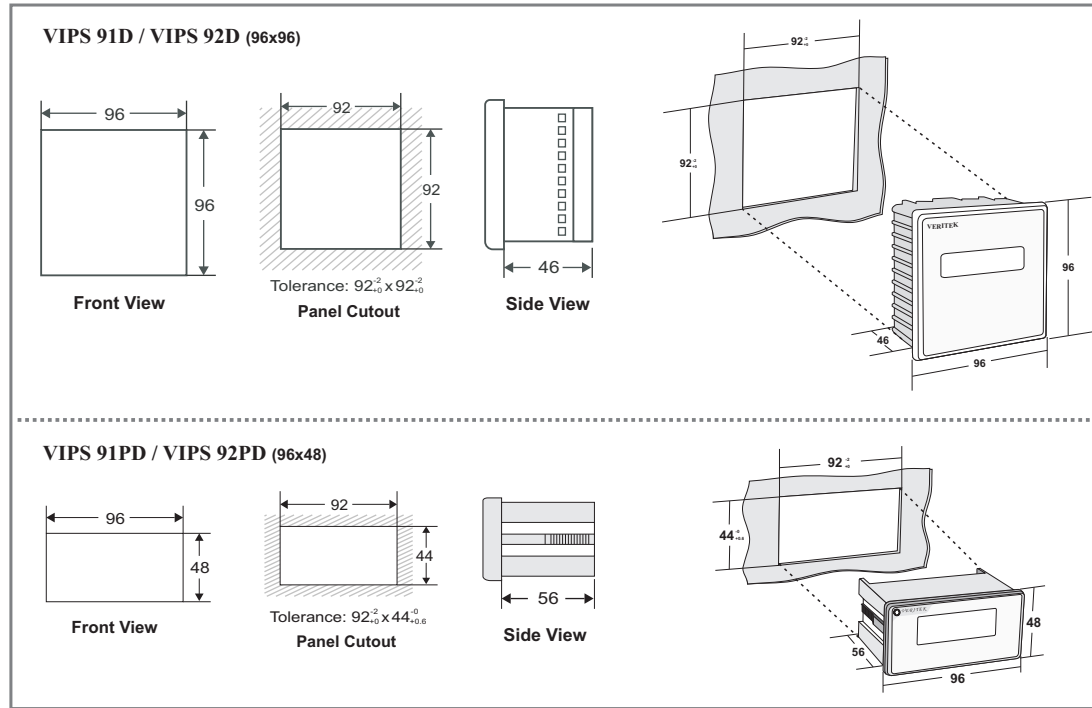
## FEATURES

- (1) State of Art Micro controller Based Design
- (2) 1 Line 4 Digit Ultra Bright LED Display
- (3) Auto Ranging
- (4) Universal Aux. Supply
- (5) Site Programmable Shunt (Ammeter)

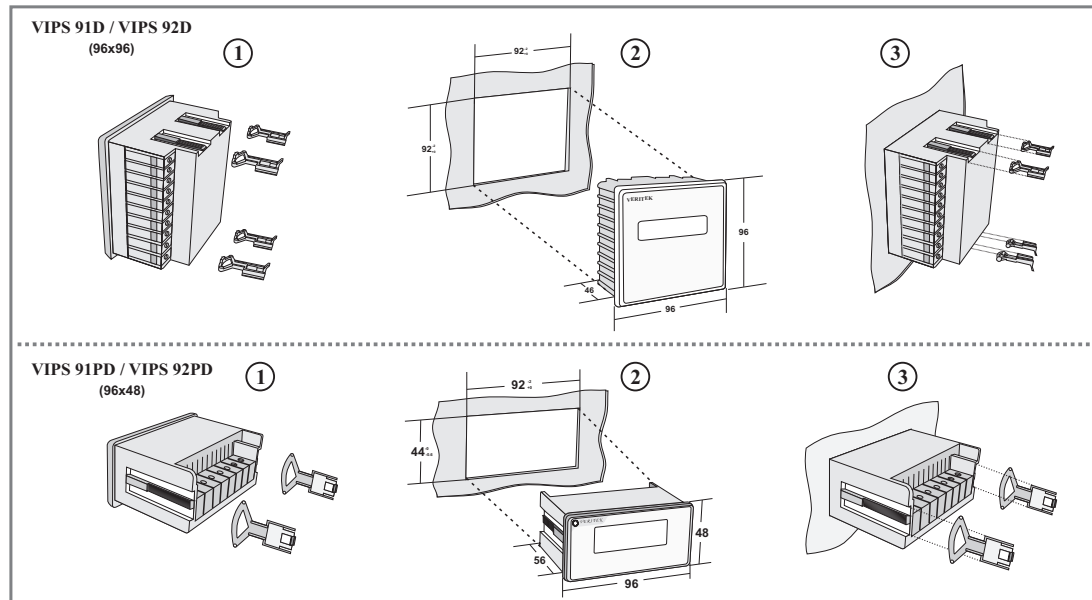
## VERITEK ENGINEERING PVT. LTD.

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## MECHANICAL DIMENSION



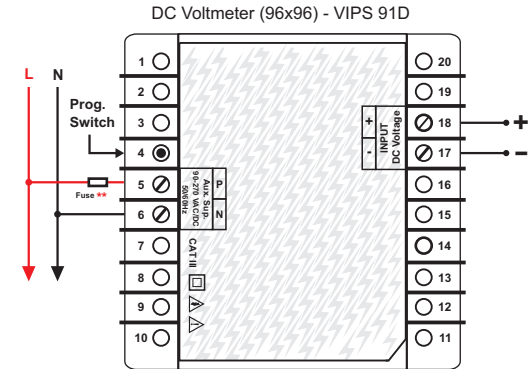
## MOUNTING ARRANGEMENT



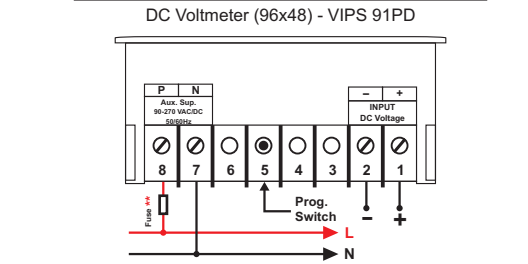
- 1) Remove the mounting clamps
- 2) Gently slide the Meter through the cut-out.
- 3) Put the mounting clamps back in the Meter.

## CONNECTION DETAILS

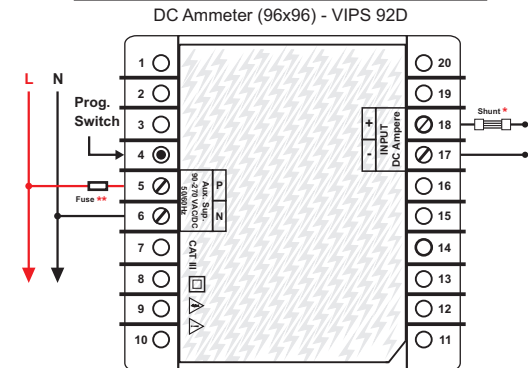
### Electrical Wiring / Connection Diagram



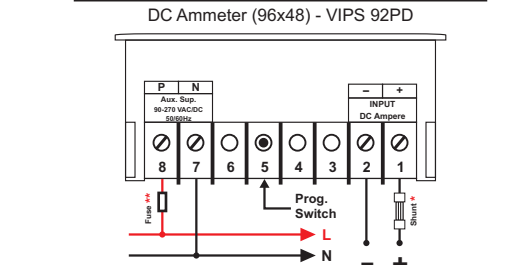
### Electrical Wiring / Connection Diagram



### Electrical Wiring / Connection Diagram



### Electrical Wiring / Connection Diagram



\* Connect Shunt Only for Shunt Programmable Ammeter  
Shunt not provided with meter \*\* Connect Fuse = 0.25 A

## SPECIFICATION

<b>Input</b>	: Voltmeter - Range 0 - 10V DC Range 0 - 20V DC Range 0 - 200V DC Range 0 - 1000V DC
	: Ammeter - Range 0 - 5A DC Range 0 - 20A DC Range 75mV (Shunt Programmable)
<b>Aux. Supply</b>	: 90 - 270 VAC / DC, 50/60 Hz
<b>Display</b>	: 1 Line x 4 Digit { 0.56 Inches 7 Segment LED Display }
<b>Ambient</b>	: -10 to 55°C
<b>Storage</b>	: -20 to 75°C
<b>Humidity</b>	: < 95% Non-Condensing
<b>Weight</b>	: Voltmeter - 120 gms Ammeter - 150 gms
<b>Dimensions</b>	: 96 x 96 x 46 mm (L x W x D) 96 x 48 x 56 mm (L x W x D)
<b>Panel Cutout</b>	: (92 <sup>+0.2</sup> )mm x (92 <sup>+0.2</sup> )mm (92 <sup>+0.2</sup> )mm x (44 <sup>+0.2</sup> )mm
<b>Mounting</b>	: Flush Mounting with Side Clamps.

## MEASUREMENT RANGES

Description	DC VOLTMETER	DC AMMETER	
Volts :			
VIPS 91D-10V	0 - 10 VDC	—	
VIPS 91PD-10V	0 - 10 VDC		
VIPS 91D-20V	0 - 20 VDC		
VIPS 91PD-20V	0 - 20 VDC		
VIPS 91D-200V	0 - 200 VDC		
VIPS 91PD-200V	0 - 200 VDC		
VIPS 91D-1000V	0 - 1000 VDC		
VIPS 91PD-1000V	0 - 1000 VDC		
Amps :			
VIPS 92D-5A	—		2% to 100%
VIPS 92PD-5A		2% to 100%	
VIPS 92D-20A		2% to 100%	
VIPS 92PD-20A		2% to 100%	
VIPS 92D-75mV		2% to 100% of Shunt Value	
VIPS 92PD-75mV		2% to 100% of Shunt Value	
Display Update	1 Sec		
Resolution	Auto Ranging		
Accuracy	±0.5% of full scale for voltage	±0.5% of full scale for Current	

## PROGRAMMING - (Only for DC Ammeter)

- Press the push button for 3 seconds behind the meter (long press) at slot no. 4 (96x96), 5 (96x48) to enter into programming mode.
- The following programming menu are available :

Menu	Symbol	Discription
1	<i>SHnt</i>	Shunt

- To move from one menu to another, short press push key.
- To enter into a particular menu, long press for 3 seconds.

## MENU 1 : SHUNT VALUE

When you enter the menu, the following options are available :

Sr. No	Shunt Value	Sr. No	Shunt Value
1	2	19	500
2	5	20	600
3	10	21	750
4	15	22	800
5	20	23	1000
6	25	24	1200
7	30	25	1500
8	40	26	2000
9	50	27	2500
10	60	28	3000
11	75	29	3200
12	100	30	4000
13	125	31	5000
14	150	32	6000
15	200	33	7500
16	250	34	10000
17	300	35	12000
18	400	36	15000

*E5c* To Escape Page

- Long press the push key to set the particular Shunt ratio. "*SRUE*" appears.
- Short press the push key to move from one option to another.

## MENU 2 : ESCAPE PROGRAMMING

Long press escape to escape programming mode "*done*" appears as conformation.

**Note : If the meter is inactive in programming mode for 30 seconds, it will come out of programming mode.**

## SAFETY PRECAUTIONS :

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If the equipment is not used in a manner specified by the manufacturer it might impair the protection provided by the equipment.

If there is physical damage to the unit then do not use it.

Read complete instruction prior to installation and operation of the unit.

## WIRING GUIDELINES :

### Warning

- To Prevent the risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement.
- Wiring shall be done strictly according to the terminal layout with shortest connection. Conform that all connection are correct.

### CAUTION :



- To ensure the safe operation of unit, check the wiring and connections.

## TEST CERTIFICATE

Type : **DC VOLTMETER  
DC AMMETER**

Accuracy : DC Voltmeter - Class 0.5% For V  
DC Ammeter - Class 0.5% For A

Accuracy Test :  
**DC Voltmeter**

VOLTAGE	
10%	100%
+/-0.5%	+/-0.5%
OK	OK

Accuracy Test :  
**DC Ammeter**

AMPS	
10%	100%
+/-0.5%	+/-0.5%
OK	OK

### Note :

A) For Digital Readouts the error is Computed in Counts.

- Class 1.0 = ± 1% of Full Scale ± 1 Count
- Class 0.5 = ± 0.5% of Full Scale ± 1 Count

**Tested By :**

**Date :**