

## **ENERGY METER**







\*VIPS 84 P With Communication

### **TEST CERTIFICATE**

Type: **ENERGY METER** 

Accuracy : Class 0.5% For V & A; 0.1% of FS for Hz

Accuracy Test:

VOLTAGE		CURRENT		FREQUENCY
10%	100%	10%	100%	100%
+/-0.5%	+/-0.5%	+/-0.5%	+/-0.5%	+/-0.1%
ок	OK	ок	ОК	OK

Power Factor		Watts		kVA	
10%	100%	10%	100%	100%	
+/-1.0%	+/-1.0%	+/-1.0%	+/-1.0%	+/-1.0%	
ok	ok	OK	OK	OK	

#### Note:

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

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

Tested By: Ms. Roshani

Date:

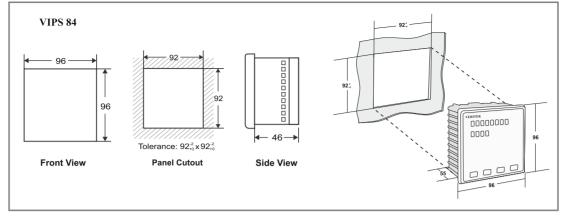
### **VERITEK ENGINEERING PVT. LTD.**

Plot No. 222, EL-Electronic Zone, MIDC, TTC Industrial Area, Mahape, Navi Mumbai - 400701, India

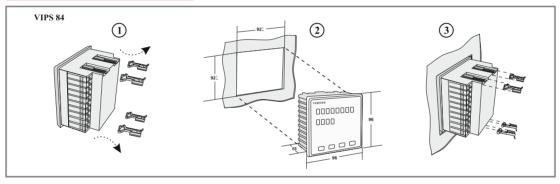
Tel.: +91-86557 47987

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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.

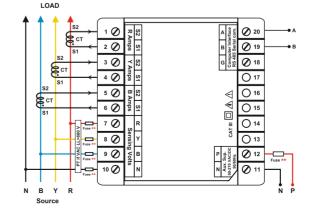
## **FEATURES**

- (1) State of Art Micro controller Based Design
- (2) 1 Line 8 Digit Ultra Bright LED Display for Energy
- (3) 1 Line 4 Digit Ultra Bright LED Display for Other Parameters
- (4) Site Programmable PT ratio (Primary & Secondary)
  Site Programmable CT ratio (Primary & Secondary)
- (5) True RMS Measurement
- (6) Password Protection
- (7) RS 485 Computer Interface (optional)
- (8) Total Harmonic Distortion
- (9) Auto Ranging
- (10) Universal Aux. Supply

# **CONNECTION DETAILS**

#### Electrical Wiring / Connection Diagram

3 Phase 4 Wire - VIPS 84 / 84P



#### SPECIFICATION

System : 3 Phase 4 Wire/ 1 Phase 2 Wire

Voltage : Range 10-300 VAC (L-N)

Range 10-500 VAC (L-L)

**Amp** : 0.015A - 6.00Amp AC

Direct 60 Amps Optional

**Burden**: 3VA Max. for Aux. Supply, 0.2VA for

Voltage & Current input

**Aux. Supply**: 90 - 270 VAC / DC, 50/60 Hz

**Display** : 1 Line x 8 Digit for energy

1 Line x 4 Digit for parameter display

{ 0.36 Inches 7 Segment LED Display }

Computation : True RMS

Frequency : 45 Hz - 65 Hz

Ambient : -10 to 55°C

Storage : -20 to 75°C

**Humidity** : < 95% Non-Condensing

**Dimesions** : 96 x 96 x 46 mm (L x W x D)

Panel Cutout : (92-2)mm x (92-2)mm

**Mounting**: Flush Mounting with Side Clamps.

Weight: 280 gms

Protection

Degree : IP20(Terminals)

IP54 (Front Of Housimg)

# **MEASUREMENT RANGES**

Voltage : Range 10-300 Volts (L-N)

: Range 10-500 Volts (L-L)

**Amp** : 0.015A - 6.00Amp AC

Direct 60 Amps Optional

Display Update: 1 Sec

Frequency: 45 to 65 Hz

**Resolution**: 0.1kWh For Energy, auto ranging

for other parameter.

**Accuracy** : ± 0.5% of full scale for voltage,

current, power, power factor.

Frequency : ± 0.1% for Hz

Energy : Class 0.5

## **DISPLAY PAGES**

Page	Symbol	Parameters
1	V L-L	Voltage (L-L) RY, YB, BR
2	V L-N	Voltage (L-N) RN, YN, BN
3	Α •	Amps R, Y, B
4	Hz •	Frequency
5	W •	Watts (Active Power) R, Y, B
6	Var	Var (Reactive Power) R, Y, B
7	VA •	VA (Apparent Power) R, Y, B
8	PF •	Power Factor R, Y, B
10	V •	Harmonics - Voltage - THDV (V led / flashes)
11	Α •	Harmonics - Current - THDI (I led / flashes)
12	E	Load Hour

## NOTE:

When the V or A LED flashes the reading are of THDV or THDI when V or A LED is steady ON it indicates voltage or current reading.

## **MANUAL SCROLL MODE:**

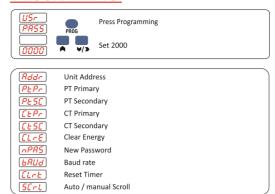
In this mode the display shows parameter of the selected page one after another.

The parameter of next / previous page can be viewed by pressing or keys.

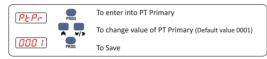
### **AUTO SCROLL MODE:**

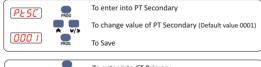
In this mode the display shows parameter of page 1 then scroll to page 2 and so on.

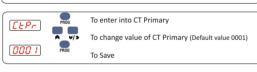
### **PROGRAMMING**











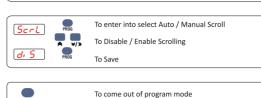
CESC	PROG	To enter into CT Secondary
	<b>■</b> ■	To change value of CT Secondary (Default value 0001)
000 1	PROG	To Save





PURA	PROG	To enter into Baud Rate
	<b>■</b> ■	To set baud rate (1200, 2400, 4800, 9600)
9600	PROG	To Save
PAr	PROG	To enter into Parity
		To set parity (Even, Odd, None)
EnEn	A _ \/>	





## **A SAFETY PRECAUTIONS**

All safety related conditions, 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

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

## **A** CAUTION :







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

The Document are Subject to change Without notification