

Model VTD

AC Voltage Sensor AC To DCV Voltage Sensor

- Range $\pm 5\%$ of Nominal
- Accuracy Class 1.0
- 2.5, 5, Or 10VDC Output
- Fast Response Time
- Isolated Transformer (UL)
- Low AC Ripple
- Meets UL506
- Fused Input



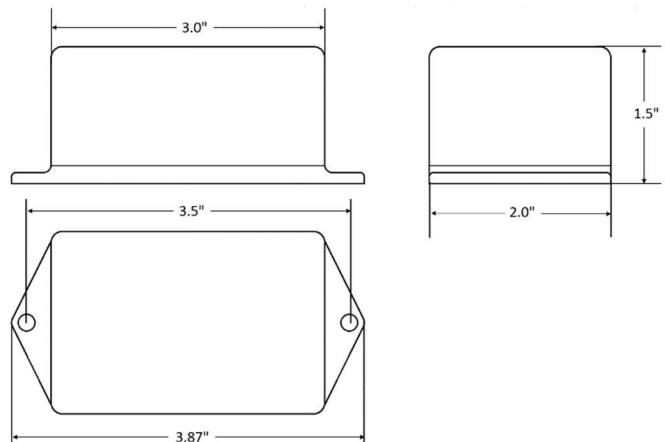
The VTD is a single phase, 50/60Hz VAC voltage sensor that converts an AC voltage to a proportional DC voltage output. No power supply is needed. The AC voltage is stepped down through a transformer to a low level and then rectified and filtered. There is a tradeoff between the ripple after filtering and the response time to reach the final DC level after a change of line voltage. It can be used to measure line voltages computerized data loggers and energy meters to AC voltages for electrical energy conservation and monitoring purposes. The overall power consumption is less than 0.1 watt and the low output voltage is set to 2.5, 5, or 10VDC.

The unit utilizes UL/VDE an internal voltage transformer with an isolation voltage rating of 5000V. An in-line fuse holder and fuse is provided for extra safety. The unit is completely encapsulated using UL recognized high voltage potting compound. Input and output connection lead wires are UL1015 rated 600VAC. A precision resistor is connected across the low output voltage to set the output impedance. UL recognized parts include isolation transformer, fuse, input and output lead wires, printed circuit board and housing.

Specifications:

Input Current (Select).....240V, 277V, 480V, or 650VAC; 50Hz or 60Hz (must specify)
Output Voltage..... 2.5, 5, 10VDC
Ripple.....Less than 50mV
Response Time.....approximately 100mS
Output Resistance.....Approximately 200 Ω
Minimum Required Interface Resistance.....50k Ω
Isolation.....Tested for 5000VAC isolation between input and output
Construction.....ABS black plastic housing
Lead Wires.....Input leads: 3ft. Black/white, rated 5kVDC minimum per UL3239
 Output leads: 3ft. twisted, black/red, 22AWG.

PART NUMBERS TO ORDER	OUTPUT VDC Select	OUTPUT VDC Select	OUTPUT VDC Select
VTD240-OUTPUT	2.5	5	10
VTD277-OUTPUT	2.5	5	10
VTD480-OUTPUT	2.5	5	10
VTD600-OUTPUT	2.5	5	10
VTD650-OUTPUT	2.5	5	10



Issue 3112018