

Model VTD AC Voltage to DCV Sensor

Made in the USA

- input 240V to 650V
- Output 2.5, 5, or 10VDC
- Accuracy Class 1.0
- Box Size 2.0"x3.0"x1.5"



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 VTD does not cover the full range from 0VAC to full line voltage -- it is designed for applications where it is important to monitor line voltage (within +/- 5%).

The AC voltage is stepped down through a transformer with a 5000V primary to secondary UL isolation rating. The lower voltage is then rectified and filtered to the final DC voltage. 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. 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.

Specifications

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

PART NUMBERS TO ORDER	OUTPUT VDC SELECT
VTD-240	2.5, 5, 10
VTD-277	2.5, 5, 10
VTD-480	2.5, 5, 10
VTD-600	2.5, 5, 10
VTD-650	2.5, 5, 10

