

# OSI UNIDIRECTIONAL DC VOLTAGE ISOLATOR MODEL VTU-

## LOW COST

### FEATURES

- Output is electrically isolated from the input and is directly proportional to the input.
- Unidirectional signals only.
- Provides 1500V dielectric protection.

### APPLICATIONS

- Monitoring of substation or electric circuit performance.
- Isolation and amplification of shunt output.
- Electric generator or solar field monitoring.

## MODEL SELECTION

INPUT DC VOLTS	STANDARD OUTPUTS MODEL VTU-		
	0-1mA <sub>dc</sub>	4-20mA <sub>dc</sub>	0-5V <sub>dc</sub>
0 - 0.05	015B	015E	015X5
0 - 0.10	016B	016E	016X5
0 - 10	001B	001E	001X5
0 - 25	002B	002E	002X5
0 - 50	003B	003E	003X5
0 - 100	004B	004E	004X5
0 - 150	005B	005E	005X5
0 - 250	006B	006E	006X5
0 - 300	007B	007E	007X5
0 - 400	008B	008E	008X5
0 - 500	009B	009E	009X5
0 - 600	010B	010E	010X5
0 - 700	011B	011E	011X5
0 - 800	012B	012E	012X5
0 - 900	013B	013E	013X5
0 - 1000	014B	014E	014X5

700-1000V models are supplied with an external divider box. 50mV and 100mV models can be used for shunt isolation.

## SPECIFICATIONS

### INPUT

- Voltage ..... See Tables  
 Frequency Range ..... dc to 1000Hz.  
 Burden  
 0.05 & 0.10mV Input models ..... >500Ω  
 All other models ..... >100kΩ  
 Overload  
 0.05-600V ..... 2 X F.S. or 850V<sub>dc</sub> max.  
 700-1000V ..... (w/external divider box) ..... 1500V<sub>dc</sub> max.

**DIELECTRIC TEST**(direct input/output/case)..... 1500V<sub>ac</sub>

### INSTRUMENT POWER

- Standard ..... 115Vac ±15%, 50/60Hz, 4VA  
 "22" option ..... 230Vac ±15%, 50/60Hz, 4VA

### OUTPUT

- Response Time .....(to 90%).....500μs  
 Loading  
 "B" models .....(0-1mA<sub>dc</sub> output).....0-5kΩ  
 "E" models .....(4-20mA<sub>dc</sub> output).....0-300Ω  
 "X5" models .....(0-5V<sub>dc</sub> output).....≥2kΩ  
 Field Adjustable Cal. .... ±10%

**ACCURACY** ..... ±0.25% R<sub>dg.</sub>, ±0.1% F.S. @dc  
 includes effects of linearity and repeatability

### TEMPERATURE

- Effect ..... (-5°C to +40°C) .... ±1.0% R<sub>dg.</sub>, ±0.1% F.S.

**5 YEAR WARRANTY**

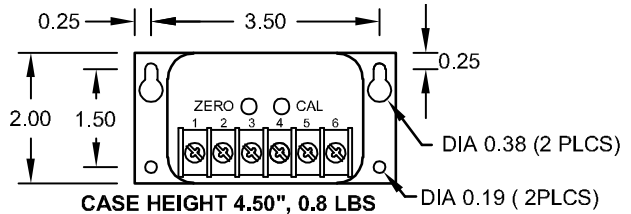


### ORDERING INFORMATION

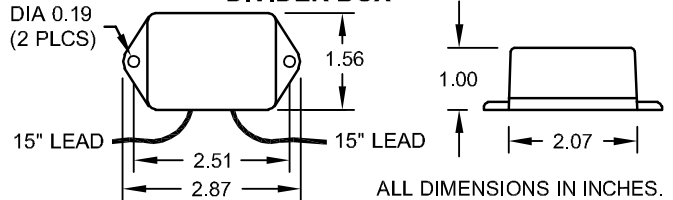
Example: 150V<sub>dc</sub> Input with 4-20mA<sub>dc</sub> Output.

**VTU-005E**

## CASE DIMENSIONS



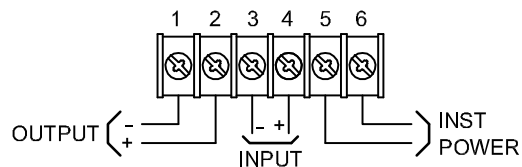
### DIVIDER BOX



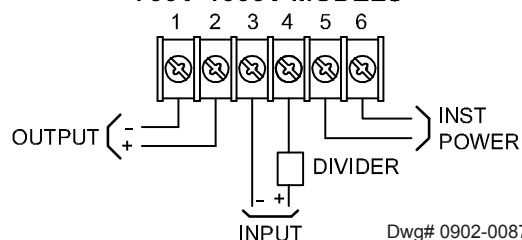
ALL DIMENSIONS IN INCHES.

## CONNECTION DIAGRAMS

### 50mV-600V MODELS



### 700V-1000V MODELS



Dwg# 0902-00870-B Rev A

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