



# DC VOLTAGE ISOLATOR

MODEL UDVI

## FEATURES

- Output is electrically isolated from the input and is directly proportional to the input.
- Unidirectional signals only.
- Provides 1500 volt isolation.

## APPLICATIONS

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



INPUT DC VOLTS	STANDARD OUTPUTS MODEL UDVI-			
	1mA	4 - 20mA	4 - 20mA*	5V
0 - 0.05	015B	015E	015E2	015X5
0 - 0.10	016B	016E	016E2	016X5
0 - 10	001B	001E	001E2	001X5
0 - 25	002B	002E	002E2	002X5
0 - 50	003B	003E	003E2	003X5
0 - 100	004B	004E	004E2	004X5
0 - 150	005B	005E	005E2	005X5
0 - 250	006B	006E	006E2	006X5
0 - 300	007B	007E	007E2	007X5
0 - 400	008B	008E	008E2	008X5
0 - 500	009B	009E	009E2	009X5
0 - 600	010B	010E	010E2	010X5
0 - 700	011B	011E	011E2	011X5
0 - 800	012B	012E	012E2	012X5
0 - 900	013B	013E	013E2	013X5
0 - 1000	014B	014E	014E2	014X5

Highlighted models are supplied with an external multiplier module. 50 and 100mV models can be used for shunt isolation.

\* Loop-powered, E2 models require instrument power as well as 24Vdc loop excitation.

## ORDERING INFORMATION

Example: 120Vdc input with  
4 - 20mA output.  
**UDVI-005E**

## MODEL UDVI SPECIFICATIONS

### INPUT

VOLTAGE: See tables

FREQUENCY RANGE: dc - 1000 Hz.

BURDEN (ohms):

.05 & .1mV models: > 500

All other models: > 100K

OVERLOAD:

0.05 - 700V: 2 times full-scale rating.

800 - 1000V: 1500V

DIELECTRIC TEST (Input/Output/Case): 1500Vac

INSTRUMENT POWER: 95 - 125Vac, 60 Hz, 4VA

### OUTPUT

**ACCURACY: ±0.25% Rdg. ±0.1% F.S. @ dc.**

Includes effects of linearity and repeatability.

RESPONSE TIME: 500 microseconds

OUTPUT LOADING (ohms):

1mA: 0 - 5K

5V: 2K minimum

4 - 20mA: 0 - 300

FIELD ADJUSTABLE CAL.: ±10%

TEMP. EFFECT (-5°C to +40°C):

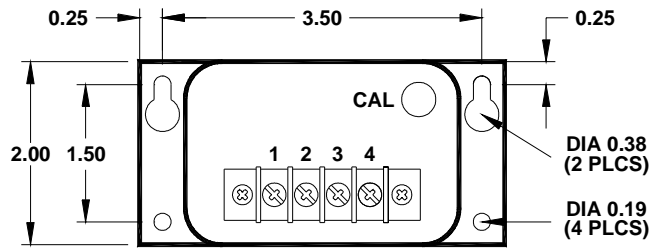
±1.0% Rdg. ±0.1% F.S.

OHIO SEMITRONICS, INC.

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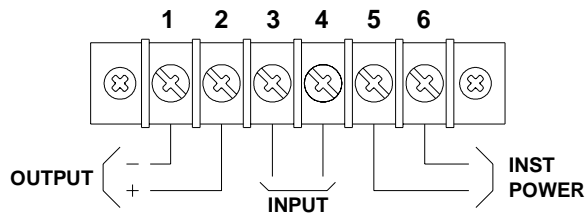
### CASE DIMENSIONS



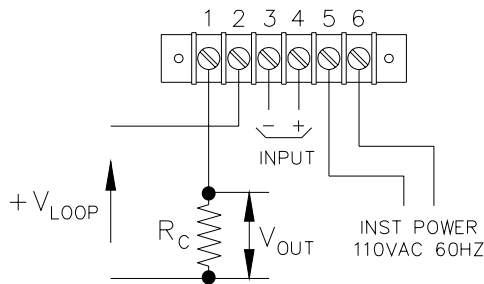
CASE HEIGHT 4.16"  
(600 MODELS 4.50")  
0.8 LBS

All dimensions in inches.

### CONNECTION DIAGRAMS



Connection diagram for B,  
E, and X5 output models



Connection diagram for E2  
output models