



# DR4300

## DC INPUT ISOLATED TRANSMITTER

### FEATURES

- Provides a Galvanic Isolated DC Output Proportional to DC Input
- 50 mV or 1 mA Minimum Input Span
- 265 V or 250 mA Maximum Input Span
- Voltage or Current Output
- High Compliance Output
- Plug-in Screw Terminal Blocks
- Choice of Input/Output Ranges
- DIN Rail Mount - Case Only 0.5" Wide
- Steel Mounting Clip
- 5 Year Warranty
- UL/cUL Recognized

### DESCRIPTION

The DR4300 provides a DC output, proportional to a DC input, with 3 way isolation between input, power, and output. The unit is useful in eliminating ground loops and measuring signals with large common mode voltages.

All of the DR Series of products provide transient protection to help eliminate damage from lightning and from other transients created on the power and signal leads.

### TYPICAL APPLICATIONS

Use for reducing noise created by ground loops. Also use for signal conversion (voltage to current, current to voltage, level change, etc.) and increasing drive capacity.

### MOUNTING

All DR Series products are designed to mount on a 35 mm DIN rail.

The products feature a steel mounting clip, with a compression spring, for secure mounting.

### SPECIFICATIONS

#### INPUT RANGE

Voltage

Select any range between  $\pm 50$  mV to  $\pm 256$  V  
(Minimum span 50 mV)  
(Maximum span 256 V)

Current

Select any range between  $\pm 1$  mA to  $\pm 250$  mA, internal shunt  
(Minimum span 1 mA)  
(Maximum span 250 mA)

#### INPUT IMPEDANCE

Voltage

400 kilohms

Current

Current Input	Input Shunt Value
1 mA	1000 OHM
10 mA	100 OHM
20 mA	50 OHM
4/20 mA	61.9 OHM
100 mA	10 OHM
250 mA	3.3 OHM

#### OUTPUT RANGE

Voltage

Select any range from -10 V to +10 V, 5 mA max load (min span 1 V)

Current

Select any range from 0 to 20 mA (min span 1 mA)  
Compliance > 20 V  
(Drive 1000 ohm at 20 mA)

#### BANDWIDTH

-3db at 3 Hz

#### OUTPUT RIPPLE

(peak to peak)  
<0.1% of span

#### ACCURACY

$\pm 0.1\%$  of span

#### LINEARITY

$\pm 0.05\%$  of span

#### COMMON MODE REJECTION

100 dB, DC to 60 Hz

#### ISOLATION, OUTPUT/INPUT/POWER

>500 megohms

Output / Power - 1000 V Peak

Input / Power / Common 1500 Vac

#### OPERATING TEMPERATURE

14°F to 158°F

-10°C to 70°C

#### TEMPERATURE STABILITY

$\pm(0.01\%$  of span)/°C max

#### POWER

24 VDC (Limits 21 to 28 VDC)

60 mA max

12 VDC (Limits 10 to 15 VDC)

60 mA max

**ORDERING INFORMATION**

**INPUT - Standard Ranges**

**Select Input**

**Current - DC**

- 01 0/1 mA
- 02 4/20 mA
- 03 0/20 mA
- 04 10/50 mA
- 05 0/50 mA
- 06 0/100 mA
- 09 0/250 mA

**Voltage - DC**

- 10 0/50 mV
- 11 0/100 mV
- 12 0/1 V
- 13 1/5 V
- 14 0/5 V
- 15 0/10 V
- 16 -10/10 V
- 17 0/20 V
- 18 0/50 V
- 19 0/100 V
- 20 0/200 V

**OUTPUT - Standard Ranges**

**Select Output**

**Current - DC**

- A 0/1 mA
- B 4/20 mA
- C 0/20 mA

**Voltage - DC**

- E 0/5 V
- F 1/5 V
- G -5/5 V
- H 0/10 V
- I -10/10V

**POWER**

- 12 VDC
- 24 VDC

**Other Input Range**

(must be within minimum to maximum specification)

- VDC     mADC

Zero Scale

Full Scale

**ACCESSORIES**

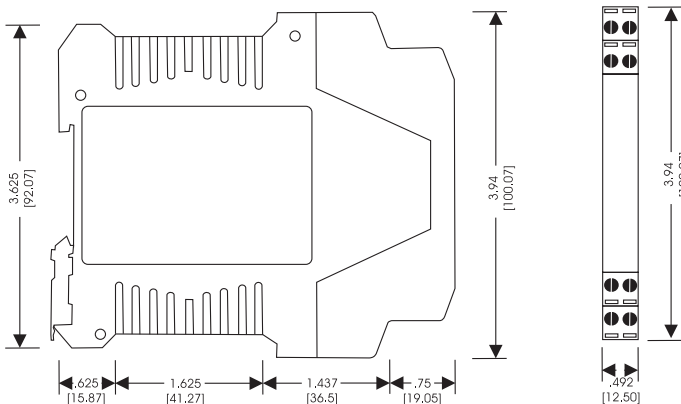
**DR4300**

DR1 DIN-Rail, 35 mm Symmetrical, 39 inches (1meter)      Qty \_\_\_\_\_

MM9046 24VDC Regulated Power Supply      Qty \_\_\_\_\_

**DIMENSIONS**

Inches [mm]



**CONNECTIONS**

- TERM 1 INPUT +
- TERM 2 INPUT -
- TERM 3 NC
- TERM 4 NC
- TERM 5 OUTPUT +
- TERM 6 OUTPUT -
- TERM 7 24 VDC +
- TERM 8 24 VDC -

