



MM4300A

DC INPUT, FIXED RANGE, ISOLATED TRANSMITTER

FEATURES

- Provides a Fully Isolated DC Output Proportional to DC Input
- Choice of Power Options
- 10 Year Warranty
- 4/20 mA and 0/10 V Versions Available

DESCRIPTION

The MM4300A provides a DC output, fully isolated from input, line power and ground, proportional to a DC input. It is useful in eliminating ground loops and common mode signals.

All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning.

It utilizes pulse width modulation to develop a pulse train with a duty cycle proportional to the input signal amplitude. This pulse train is coupled through a pulse transformer where the duty cycle data is converted to a proportional DC level in the output circuits.

TYPICAL APPLICATIONS

Eliminates ground loops and large common mode signals. Use for voltage/current scaling and conversion with isolation for buffering and noise reduction.

SPECIFICATIONS

INPUT RANGE

Voltage
0/10 VDC
Current
4/20 mA

OUTPUT RANGE

Voltage
0/10 VDC
2 kilohms minimum load
Current
4/20 mA
>24 V compliance
(1200 ohms max at 20 mA)

OUTPUT RIPPLE (Peak-to-Peak)
<0.1% of span

ISOLATION

Breakdown, Output / Input
>500 megohms
>1000 VAC
Breakdown, Power / Circuitry
>1500 VAC rms

RESPONSE TIME

≤100 ms

ACCURACY

±0.1% of span

LINEARITY

±0.05% of span

COMMON MODE REJECTION

120 dB, DC to 60 Hz

OPERATING TEMPERATURE

14°F to 140°F/-10°C to 60°C

TEMPERATURE STABILITY

±0.02% of span +30 mV/°C
max

POWER

115 VAC ±10%, 50/60 Hz
(2.5W max)

230 VAC ±10%, 50/60 Hz
(2.5W max)

24 VAC ±10%, 50/60 Hz
(2.5W max)

(DC Power Option)

24 VDC (limits 21-32 VDC)
(2.5 W max)

12 VDC (limits 10-16 VDC)
(2.5 W max)

ORDERING INFORMATION

POWER

- 115 VAC, 50/60 Hz Power
- 230 VAC, 50/60 Hz Power
- 24 VAC, 50/60 Hz Power
- 24 VDC, Power, Transformer Isolated
- 12 VDC, Power, Transformer Isolated

INPUT

Select Input

- 0/10 VDC
- 4/20 mA

OUTPUT

Select Output

- 0/10 VDC
- 4/20 mA

OPTIONS

- Conformal Coating

TAGS

Specify Tag Numbers

Tag number is typed on product label at no charge.

Enter Tag Number(s)

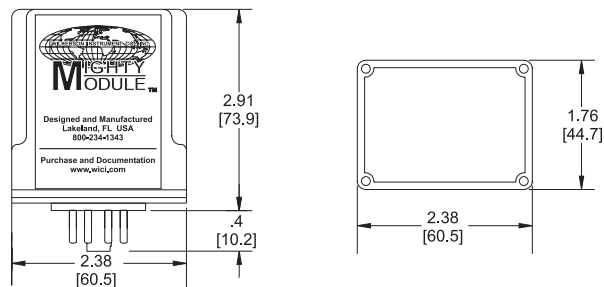
ACCESSORIES

MM4300A

DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	Qty_____
MP008	Plastic Socket, 8-Pin, Panel Mount or PVC Snap Track	Qty_____
TRK48	PVC Snap-Track, 4 ft, for MP008, MP011, & DMP8500	Qty_____
DMP008	DIN-Rail Mounting Socket, 8-Pin, 35 mm Symmetrical Rail	Qty_____
CLP1	Holddown Assembly for MP008 and MP011	Qty_____
HKB-HK2D-8	Explosion-Proof Housing with MP008 Installed	Qty_____

DIMENSIONS

Inches [mm]



CONNECTIONS

- PIN 1 Power AC L1 or DC +
- PIN 2 No Connection
- PIN 3 Power AC L1 or DC -
- PIN 4 No Connection
- PIN 5 Signal Input +
- PIN 6 Signal Input -
- PIN 7 Signal Output +
- PIN 8 Signal Output -