

TW8201

AC INPUT ISOLATED TWO-WIRE TRANSMITTER

FEATURES

- Provides DC Current Output Proportional to AC Input
- Fully Isolated Input / Output
- 100 mV or 100 microamps Minimum Input Span
- Unlimited* Choice of Input Ranges
- Low-Drift Chopper-Stabilized Input
- NEMA-4X Splashproof and Corrosion Resistant
- 5 Year Warranty

DESCRIPTION

The TW8201 provides a DC output current proportional to an AC input signal.

Isolation is provided in the transmitter. The transmitter is protected by a gasketed, NEMA-4X glass-filled polyester housing and operates from -40°C to +85°C. Optional conformal coating of the electronic components makes the TW8201 extremely reliable and resistant to the corrosion, moisture

and fungus associated with many industrial environments.

The chopper-stabilized input amplifier provides accurate, low-drift operation. All Wilkerson Products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning.

The output ZERO and SPAN controls are accessible through the top of the housing.

Terminations are made to screw terminal connectors on the top of the case.

TYPICAL APPLICATIONS

Remote AC data acquisition, isolation, AC motor status and control.

SPECIFICATIONS

INPUT RANGE

Voltage
select any range from
0 to 250 V rms max
(min span 100 mV)

Current
select any range 0 to 5 A rms max**
(min span 100 µA, internal shunt)

OUTPUT RIPPLE (Peak-to-Peak)

<0.1% of span

ISOLATION

Breakdown Voltage
>600 VAC rms

Resistance
>500 megohms

OPERATING TEMPERATURE

-40°F to 185°F / -40°C to 85°C

TEMPERATURE STABILITY

±0.01% of span / °C max

POWER REQUIRED

12 to 48 VDC, polarity protected

INPUT FREQUENCY

40 Hz to 1 kHz Sinewave

MAX LOAD RESISTANCE

= [(Vsupply - 12)/I out mA] kilohms

SUPPLY VOLTAGE EFFECT

0.01% of span max

INPUT IMPEDANCE

Voltage
1 megohm

Current Input Value	Input Shunt Value
1 mA	100 OHM
10 mA	10 OHM
20 mA	5 OHM
100 mA	1 OHM
1 A	0.1 OHM

RESPONSE TIME

700 ms typical

ACCURACY

±0.05% of span

LINEARITY

±0.01% of span

COMMON MODE REJECTION

120 dB, DC to 60 Hz

* Within Specified Range Limits.

** For input values greater than 1A rms select appropriate external shunt resistor and use with 0-500 mV rms input.

OUTPUT RANGE

4/20 mA

ORDERING INFORMATION

INPUT

Select Units

VAC mAAC AAC

Enter Input

Zero Scale

Full Scale

OPTIONS

Conformal Coating

TAGS

Specify Tag Numbers

Tag number is typed on product label at no charge.

Enter Tag Number(s)

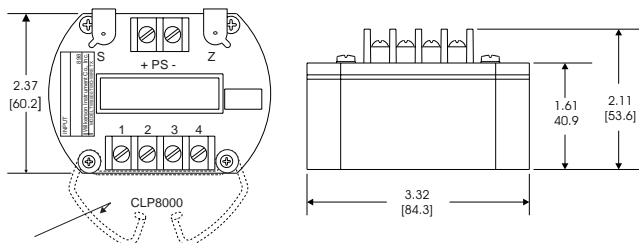
ACCESSORIES

TW8201

DMP8500	Mounting Plate, DIN-Rail & Surface (SC5000 & TW8000)	QTY _____
HKB-HFC	Killark Explosion-Proof Housing, no Window (TW8000)	QTY _____
HKB-HKGL	Killark Explosion-Proof Housing with Window (TW8000)	QTY _____
DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	QTY _____

DIMENSIONS

Inches [mm]



CONNECTIONS

PIN PS +	Power Supply +
PIN PS -	Power Supply -
PIN 1	Input
PIN 2	Input
PIN 3	No Connection
PIN 4	Shield