

# HIGH-ACCURACY ISOLATED TRANSMITTERS

## ISOLATE mA, DC, AND Vdc SIGNAL INPUTS

### PXTX Series



PXTX-4900, shown actual size.

- ✓ Voltage Input with Current Output or Current Input with Voltage Output
- ✓ 1500 Vrms of CMV Isolation
- ✓ Factory Calibrated for Accuracy of  $\pm 0.1\%$
- ✓ Operates from 115 Vac 50/60 Hz or 230 Vac
- ✓ Rugged Epoxy-Encapsulated Design

OMEGA® PXTX-4900 and PXTX-4901 transmitters isolate a 4 to 20 mA current loop from the 0 to 10 Vdc signal and the power line. They are ideal for eliminating ground loops and common-mode signals. In the PXTX-4901, which converts 4 to 20 mA to 0 to 10 Vdc, the input resistance is less than 50  $\Omega$ , generating less than 1V loop voltage drop at 20 mA loop current. The PXTX-4900 converts a 0 to 10 Vdc to a 4 to 20 mA output signal. For both models, the 400 Hz frequency response provides a settling time of less than 0.003 seconds to 0.1%, which prevents signal degradation. Both models are completely encapsulated for use in rugged environments. Protected against shock and vibration, they will provide years of reliable and accurate operation. All connections are easily made using the conveniently located barrier strips.

### SPECIFICATIONS

**PXTX-4900 Input:** 0 to 10 Vdc

**Output:** 4 to 20 mA

**Loop Resistance:** Up to 1000

**Loop Compliance:** 20 V maximum

**PXTX-4901 Input:** 4 to 20 mA

**Output:** 0 to 10 Vdc

**Load Resistance:** 2000  $\Omega$  minimum

**Load Capacitance:** 0.01  $\mu$ F

**Isolation:** 1500 Vrms 50/60 Hz

**Capacitance Line to Input**

**or Output:** 30 pF

**Input to Output:** 80 pF

**Accuracy:**  $\pm 0.1\%$  of span maximum

**Nonlinearity:**  $\pm 0.05\%$  of span

**Temperature Stability 0 to 55°C:**

**Span:**  $\pm 35$  ppm/ $^{\circ}$ C

**Zero:**  $\pm 50$  ppm/ $^{\circ}$ C of span

**Input Resistance:**

**PXTX-4900:**  $> 10$  M $\Omega$

**PXTX-4901:** 47.6  $\pm 0.3\%$   $\Omega$

**Input Current Maximum:**

**PXTX-4900:** 7 mA

**PXTX-4901:** 70 mA

**Response:** 3 dB bandwidth

400 Hz typical

**Rise Time:** 10 to 90% 0.9 ms typical

**Settling Time:** To 0.1% < than 3 ms

**Noise:** 0.1 Hz to 400 Hz < 0.01% rms of span

**CCMR:** 100 dB

**Power Requirements:** 105 to 125 Vac 50/60 Hz, 3.2 VA (230 Vac optional)

**Operating Temp:** -20 to 70°C (-4 to 158°F)

**Storage Temp:** -20 to 85°C (-4 to 184°F)

**Size:** 95.25 L x 50.80 W x 72.90 mm H (3.75 x 2 x 2.87")

**Weight:** 540 g (19 oz)

### To Order

MODEL NO.	INPUT / OUTPUT (POWER)
PXTX-4900	0 to 10 Vdc/4 to 20 mA transmitter (115 Vac)
PXTX-4901	4 to 20 mA/10 Vdc transmitter (115 Vac)
PXTX-4900-230	0 to 10 Vdc/4 to 20 mA transmitter (230 Vac)
PXTX-4901-230	4 to 20 mA to 0/10 Vdc transmitter (230 Vac)

Comes complete with operator's manual.

**Ordering Examples:** PXTX-4900, 0 to 10 Vdc input and 4 to 20 mA output.

PXTX-4901, 4 to 20 mA input and 10 Vdc output.

