

ADM240K Slidewire / Resistance Transmitter / Isolator

- Suitable for use in SIL 1 & SIL 2 rated (EN61508) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Suitable for Any Resistance /Slidewire/ Potentiometer type Input
- Supply voltage:

115Vac	±20%
240Vac	±20%
24Vdc	±10%
48Vdc	±10%
- RFI Protection to EN61000-3:2006/A2:2010
- Non-Smart/ Non-uProcessor based, Type A instrument
- AMELEC standard 10 year warranty

APPLICATION

- Any application where a potentiometer, thermistor or other type resistance needs to be converted, isolated and retransmitted.

TECHNICAL SPECIFICATION

INPUT

2 or 3-wire Potentiometers may be specified in the range of: 1K Ω up to 50K Ω wire wound potentiometer. Version also available for plastic film pots. (Input excitation 1V dc @ 2mA max, other options available). Resistance input spans available in the range of: 100 Ω up to 60K Ω

OUTPUT

DC current or voltage specified in the range of:
 Current up to 100mA max in Sink configuration (externally powered)
 Current up to 22mA max Source configuration (Internally powered)
 Voltage up to 20V max @ up to 5mA per output.
 Typical output range: 4 - 20mA (Source port, into 1200 Ω load max)

CONTROLS

15 turn potentiometer.
 Zero \pm 25%
 Span \pm 25%

INDICATOR

Power **ON**: LED, Amber.

PERFORMANCE

Accuracy/Linearity: $\leq \pm 0.1\%$ resistance span
 Response time: < 400mS (10-90% span step change)
 Supply consumption: < 3VA
 Input O/C response: Upscale drive as standard
 (O/C response Downscale drive 'X' option available)

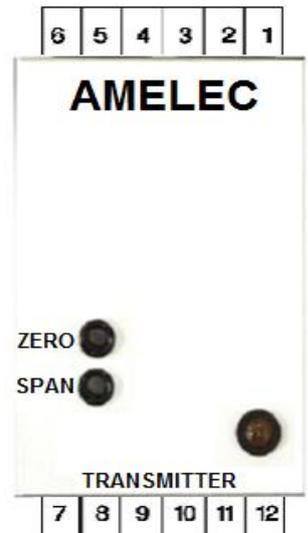
PROTECTION

Isolation 500V DC: Input/Output//Supply/Earth
 Internal Fuse.
 Input over range up to typically 300%.
 RF Immunity: 20MHz-3GHz/5.25GHz 10V/m, 80MHz-1GHz/5.6GHz 30V/m
 (889MHz/1.75GHz 40V/m)

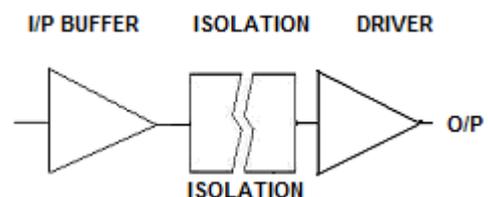
TERMINATION



FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONS

Storage temperature: - 40 to +70 $^{\circ}$ C
 Operating Ambient: -15 to +55 $^{\circ}$ C
 Relative Humidity: 5 to 95% RH (Non-condensing)
 EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial)

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 182d mm
 Mounting: Din Rail std. (Surface/Seismic Keyhole plate & Front of Panel Mounting options available on request)
 Weight < 550g

ADD ON / OPTIONS

P: Test point (Output loop monitoring)
 DI: Digital Display on front fascia available
 (Non standard supply or output ranges available)