

ADM250K AC Current/Voltage Signal Transmitter / Isolator

- Suitable for SIL 1 & SIL 2 rated (EN 61508) safety instrumented system (SIS) loop applications, 1oo1, (HFT:0)
- Suitable for low level ac current or voltage monitoring
- Supply voltages:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
 - 110Vdc $\pm 10\%$
- RFI protection to EN 61000-4-3:2006/A2:2010 (20-3000 MHz 10 V/m, 20-1000MHz 30V/m)
- Non-Smart/Non-uProcessor based, Type A instrument
- Amelec standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT

Any Sinusoidal AC voltage or current signal specified in ranges of:
 Current spans from 1mA up to 200mA ac
 Voltage spans from 50mV up to 100V ac
 Frequency range from 10-400Hz std (up to 5000Hz available)
 Typical input range: 0-5mA ac or 0-20Vac

OUTPUT

DC current or voltage specified in the range of:
 Current up to 100mA max in Sink configuration (Externally powered)
 Current up 22mA max Source configuration (Internally powered)
 Voltage up to 20V max.
 Typical output: 4-20mA (max load 1200 Ω) or 0-10Vdc (min load 500 Ω)

CONTROLS

15 turn potentiometer.
 Zero $\pm 25\%$
 Span $\pm 50\%$

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity/Accuracy: $< \pm 0.1\%$
 Response time: Typically $< 200\text{ms}$
 Supply consumption: $< 3\text{VA}$
 Input open circuit response: Downscale drive as std

PROTECTION

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

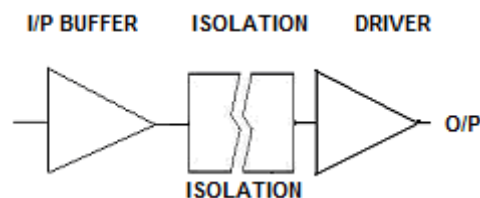
TERMINATION

AC Input $\sim$	1
$\sim$	2
Scn	3
	4
	5
	6
OUTPUT +	7
OUTPUT -	8
Scn	9
Earth	10
Live / +	11
Neutral / -	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONS

Storage temperature: -40 to +70 $^{\circ}\text{C}$
 Operating Ambient: -15 to +55 $^{\circ}\text{C}$
 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 (TS35) or Surface by seismic Keyhole plate
 (Seismic mounting plate option Dims: 50w x 130h mm)
 Weight $< 500\text{g}$

ADD ON / OPTIONS

P: Test point (Output loop monitoring)
 DI = A 3½ digit display of the input or output in units to suit

Non standard Power supply ranges & Plug-in Terminal options also available