

ADM251K AC Signal Transmitter / Isolator with Dual Output

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, HFT:0
- Supply voltages: 115Vac $\pm 20\%$
240Vac $\pm 20\%$
24Vdc $\pm 2.5V$
48Vdc $\pm 5V$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- Non Smart / Non-uProcessor, Type A instrument
- AMELEC Standard 10 year warranty

APPLICATION

- Any application where AC voltage or current signals need to be converted/isolated, split and re-transmitted.

TECHNICAL SPECIFICATION

INPUT

Any Sinusoidal AC voltage or current signal can be specified, in the range of:

Current up to 200mA max (Passive) or Voltage up to 100V max as std. Frequency range from 10Hz to 400Hz as std. (Higher freq, current or voltage input options also available)

OUTPUTS

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: any range up to 20Vdc max may be specified.

Typical output range: 2 x 4 - 20mA (Active, $\leq 550\Omega$ loads)

CONTROLS

15-turn potentiometers for each output channel.

Zero $\pm 25\%$

Span $\pm 50\%$

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: $< \pm 0.1\%$ span

Response time: typically $< 200\text{ms}$ (0-100% step change)

Accuracy: $< \pm 0.1\%$ span

Supply regulation: AC supply $\pm 20\%$, DC supply $\pm 10\%$

Supply consumption: $< 3\text{VA}$

TERMINATION

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

FRONT VIEW



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C

Operating Ambient: -15 to +55 °C

Relative Humidity: 5 to 95% RH (Non-Condensing)

EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial Levels)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm

Mounting: Din Rail (TS35) as std

(optional Seismic/Surface Keyhole plate, 50w x 130h mm)

Weight $< 500\text{g}$ (Plug-in screw terminals option also available)

RF IMMUNITY

20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$, 80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$.

PROTECTION

Isolation: 500Vdc: Input/Output/Output/Supply/Earth.
Internal Fuse.

Input over range: typically up to 300%.

Input Open Circuit response: Downscale drive as std
(O/C Upscale drive option 'X' available)

IP Rating: IP20