

ADM230K Process I/V Signal Transmitter / Isolator

- Suitable for SIL 1, SIL 2 & SIL3 rated safety instrumented system (SIS) loop applications (EN 61508-2)
- Non Smart / Non-uProcessor, Type A instrument
- Supply voltage options: 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
20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$, 80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$
(889MHz/1.75GHz $\leq 40\text{V/m}$)
- Amelec standard 10 year Warranty

TECHNICAL SPECIFICATION

INPUT

DC Current or Voltage can be specified in the range of:

Current from 1mA span, up to 100mA max (Passive input port)

Voltage from 0.4V span, up to 150Vdc max

Typical input: 4 - 20mA (impedance 20 Ω , max 400mV loop drop)

OUTPUT

DC current or voltage specified in the range of:

Current up to 22mA max Source configuration (Internally powered)

Voltage up to 20Vdc max

Typical output range: 4 - 20mA (Source port, max load 1200 Ω)

Current up to 100mA max in Sink configuration (externally powered)

CONTROLS

15 turn potentiometer.

Zero $\pm 25\%$

Span $\pm 50\%$

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: $< \pm 0.1\%$ span

Accuracy: $< \pm 0.1\%$ span

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

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

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

PROTECTION

Isolation: 500V DC Input/Output/Supply/Earth

Internal Fuse.

Input over range: typically 300%.

Input open circuit response: Downscale drive as std

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

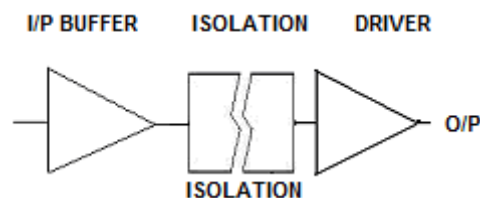
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 $^{\circ}\text{C}$

Operating Ambient: -15 to +55 $^{\circ}\text{C}$

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

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm

Mounting: Heavy duty DIN Rail (TS35) as standard,

Seismic / Surface keyhole plate & Front of Panel mount options also available (seismic mounting plate Dims: 50w x 130h mm)

Weight $< 500\text{g}$

ADD ON / OPTIONS

J : Input injection jack socket

P : Test point (input &/or Output monitoring)

HS : High speed response $< 20\text{ms}$ for 100% span step change

DI : 3.5 digit LCD or 4.5 digit Red LED front fascia Digital Display

X : Input open circuit response Upscale drive

M : 24Vdc@22mA input Loop Excitation for field instruments