

ADM230XK-2 Dual Channel 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: 24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- 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 (per Channel)

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 (per Channel)

DC current or voltage specified in the range of:

Current up to 22mA max Source configuration (Internally powered)
Voltage up to 10Vdc max
Typical output range: 4 - 20mA (Source port, max load 550 Ω)
Current up to 100mA max in Sink configuration (externally powered)

CONTROLS (per Channel)

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

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: $< \pm 0.1\%$ span
Response time: Typically $< 100\text{ms}$
Accuracy: $< \pm 0.1\%$ span
Supply regulation: AC supply $\pm 20\%$, DC supply $\pm 10\%$
Supply consumption: $< 3\text{VA}$

PROTECTION

Isolation: 500V DC Input/Input/Output/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)

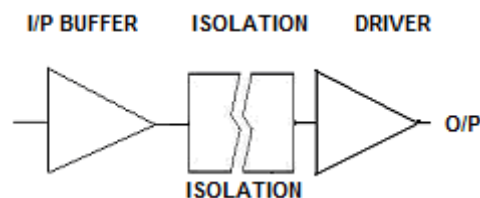
TERMINATION

Input 1 +	1
Input 1 -	2
Scn	3
Input 2 +	4
Input 2 -	5
Scn	6
Output 2 +	7
Output 2 -	8
Output 1+	9
Output 2 -	10
Supply / +	11
Supply / -	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM (per Channel)



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °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 O/C response Upscale &/or other 'special' customising
M : 24Vdc@22mA input Loop Excitation for field instruments