

ADC311XK-2 Dual Channel Process Signal Scale & Bias Transmitter / Isolator

- Suitable for SIL 1 & SIL 2 rated safety system loop applications (IEC61508-2) as 1oo1 architecture (HFT:0)
- Suitable for combinations of process voltage / current inputs and outputs, including Bi-polar & Reverse Acting signals
- Supply voltage options: 24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI protection to EN 61000-4-3:2006/A2:2010
- Non-Smart / Non-uProcessor based , Type A instrument
- Amelec standard 10 year Warranty

TECHNICAL SPECIFICATION (per Channel)

INPUT

DC current / voltage can be specified in the range of:

Current up to 100mA max (Passive/Sink ports)

Voltage -10 to +100V max

Typical input: 8-16mA , 20-4mA (Passive) or -10V to +10Vdc

OUTPUT

DC current or voltage specified in the range of:

Current up 22mA max Source configuration (Internally powered)

Voltage up to 20V max span @ up to 5mA per output.

Typical output range: 4 - 20mA, 20-4mA (Source) or -10V to +10Vdc

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

CONTROLS

15-turn blindset potentiometers: Zero $\pm 25\%$, Span $\pm 50\%$

INDICATOR

Power **ON**: LED, Amber.

PERFORMANCE

Linearity/ Accuracy: $< \pm 0.1\%$

Response time: Typically $< 100\text{ms}$ as std

Supply regulation: 24/48V DC $\pm 10\%$ as std

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

PROTECTION

Isolation: 500V DC: Input/Input/Output/Output/Supply/Earth
Internal Fuse.

Input over range: up to typically 200%.

Input open circuit response: Downscale drive as std

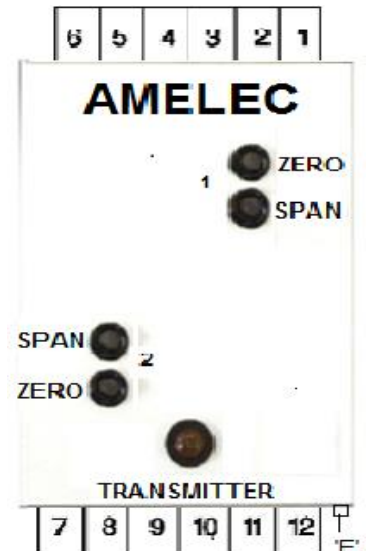
RF Immunity: 20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$,

(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$)

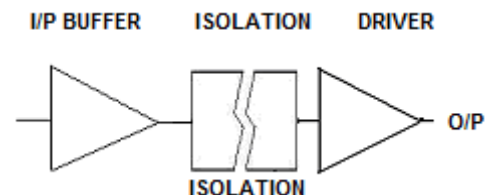
TERMINATION

INPUT 1+	1
INPUT 1-	2
Scn	3
INPUT 2+	4
INPUT 2-	5
Scn	6
OUTPUT 1 +	7
OUTPUT 1 -	8
OUTPUT 2 +	9
OUTPUT 2 -	10
SUPPLY +	11
SUPPLY -	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM (per Channel)



ENVIRONMENTAL CONDITIONS

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 / DIMENSIONS

Enclosure: 50w x 75h x 182d mm

Mounting: Heavy duty DIN Rail (TS35) as std .

Surface/Seismic keyhole plate or Front of Panel mounting options also available. (Surface mounting plate: 50wx130h mm)

Weight $\leq 550\text{g}$

ADD ON / OPTIONS

HS : Higher speed Response

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

X : Input O/C response Upscale, or other 'special' customising