

ADP451EPK AC Current Transducer / Isolator

- Suitable for SIL 1/ SIL 2 rated (EN 61508) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart/Non-uProcessor based, Type A instrument
- Supply voltage options: 115Vac $\pm 20\%$
240Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
(110Vdc $\pm 10\%$ 'X' option available)
- RFI protection to EN 61000-4-3:2006/A2:2010
(20-3000 MHz 10 V/m, 20-1000MHz 30V/m)
- Amelec standard 10 Year warranty

TECHNICAL SPECIFICATION

INPUT

AC Current ranges up to 10Amps, typically 0-1Amp or 0-5Amp.
Intermediate ranges available on request at no extra cost

OUTPUT

DC current or voltage specified in the range of:
Current up to 100mA max in Sink configuration (externally powered)
Current up to 22mA max Source configuration (Internally powered)
Voltage up to 20V max @ up to 5mA per output.
Typical output range: 4 - 20mA (Source, max load 1200ohms)

CONTROLS

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

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity/Accuracy: $< \pm 0.2\%$
Response time: Typically $< 200\text{ms}$
Supply regulation: AC $\pm 20\%$, DC $\pm 10\%$
Supply consumption: $< 2\text{VA}$
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 $\leq 40\text{V/m}$)

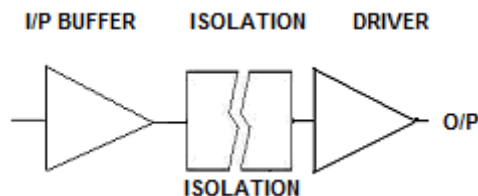
TERMINATION

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 °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)

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 182d mm
Mounting: DIN Rail (TS35) or Surface by Seismic Keyhole Plate
(Surface mounting plate option Dims: 50w x 130h mm)
Weight $\leq 500\text{g}$

ADD ON / OPTIONS

P: Test point (Output loop monitoring)
DI = $\leq 4\frac{1}{2}$ digit display of the input or output signal in units to suit.

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