

ADM270K Strain Gauge Transmitter / Isolator

- Non-Smart / Non-uProcessor based, Type A module
- Supply voltage: 24Vdc / 48Vdc / 115Vac / 230Vac
- RFI protection to EN 61000-4-3:2006/A2:2010
- Amelec standard 10 year warranty
- Suitable for SIL 1, 2, & 3 rated (EN 61508-2) Safety System loop applications

APPLICATION

- Weighing system for tanks, hoppers and silos
- Crane protection & control system
- Pressure sensor utilising strain gauges
- Float level meter utilising strain gauges
- Load cells utilising strain gauges

TECHNICAL SPECIFICATION

FUNCTION

Provides a DC output signal proportional to a bridge type strain gauge utilised in load cells and pressure transducers

INPUT

Any mV signal range (Minimum span 4mV)
Excitation 10Vdc at up to 30mA as std.

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 in Source configuration (Internally powered)
Voltage source up to 20Vdc max
Typical output range: 4-20mA (max load 1200Ω)

CONTROLS

Zero / Span: 15 turn blindset potentiometers.

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Accuracy/Linearity: < ±0.1%
Response time: < 200mS (0-100% step change)
Supply Consumption: < 3VA

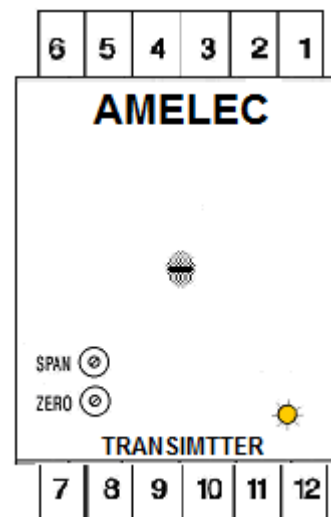
PROTECTION

Input O/C drive Upscale as std, Downscale may be specified
Isolation: 500Vdc. Input/Output/Excitation/Supply/Earth Internal Fuse.
Input over range up to typically 300%.
RF Immunity: 20MHz-3GHz/5.25GHz ≤10V/m,
(80MHz-1GHz/5.6GHz ≤30V/m, 889MHz/1.75GHz ≤40V/m)

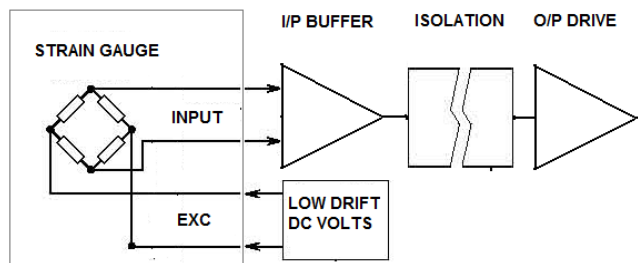
TERMINATION

INPUT +	1
INPUT -	2
EXC +	3
EXC -	4
Scn	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 levels)

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 182d mm
Mounting: Din Rail (TS35) or Surface by seismic Keyhole plate
& Front of Panel mounting options available
Weight < 500g

ADD ON / OPTIONS

DI: LCD or LED Display for local monitoring
P: Output Test Point
Non standard Power supply ranges available