

AHM 731K Process Signal Transmitter / Splitter / Isolator

- Suitable for SIL 1, 2 & 3 rated (EN 61508-2) safety instrumented system loop applications
- Supply voltage 21 to 30Vdc
- RFI Protection to EN 61000-4-3:2006/A2:2010
- Non-Smart / Non-uProcessor based instrument
- AMELEC Standard 10 year warranty

TECHNICAL SPECIFICATION

FUNCTION

Process V / I input signal Converter / Splitter / Isolator

INPUT

Any DC current / voltage can be specified in the range of:
 Current ranges up to 100mA max (Passive input port)
 Voltage ranges up to 150V max (impedance 1M Ω)
 Typical input: 4 - 20mA (Passive port, impedance 20 Ω)

OUTPUTS

Each DC current or voltage may be specified in the range of:
 Current up to 100mA max in Sink configuration (externally powered)
 Current up 22mA max in std Source configuration (Internally powered)
 Voltage ranges up to 10V max (min loads 500 Ω)
 Typical output: 2 x 4-20mA (Source ports, max loads 550 Ω)

CONTROLS

Zero / Span: 15 turn potentiometers to calibrate Each Output.
 Nom $\pm$ 20% span adjustment available

INDICATOR

Yellow Led: power  indicator

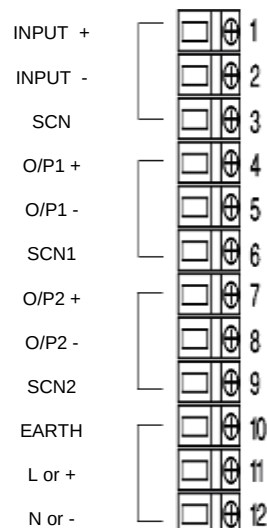
PERFORMANCE

Response time: Typically <100mS (0-100% step)
 Accuracy/Linearity : $\pm$ 0.1%
 Supply regulation: 21-30Vdc, nom 24 Vdc
 Supply Consumption: <2VA
 Input O/C response: Downscale drive as std

PROTECTION

Isolation: 500Vdc Input/Output1/Output2/Supply/Earth
 Internal Fuse.
 Fail safe on loss of power.
 Input over range: typically 300%.
 Output Saturation: typically 125%.
 RF Immunity: 20MHz-3GHz/5.25GHz $\leq$ 10V/m,
 80MHz-1GHz/5.6GHz $\leq$ 30V/m, 889MHz/1.75GHz $\leq$ 40V/m.

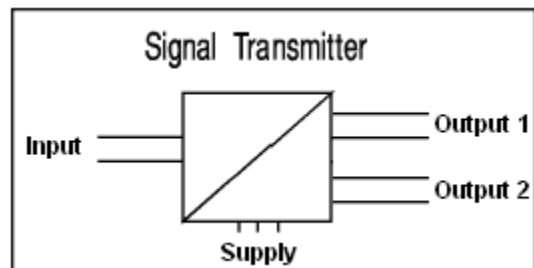
TERMINATION



FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: -40 to +70 $^{\circ}$ C
 Operating Ambient: -15 to +55 $^{\circ}$ C
 Relative Humidity: 5 to 95% RH (Non-Condensing)
 EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial Levels)

MOUNTING / DIMENSION

Instrument: Single Card with 3U high 4E wide front plate
 Mounting: 19" rack / 84E wide (See rack GA for details)
 Card weight < 200g

ADD ON / OPTIONS

DI: Common LCD or LED display option for local monitoring
 P: Test point(s) for Output monitoring
 X: READ buss line to show input on Common DI module
 X: Input O/C response UPSCALE drive
 Non standard &/or AC Power supply ranges also available