

AHM730-P-RIS Process Signal Transmitter/Isolator

- Non Smart / Non-uProcessor based, Type A instrument
- Supply voltage 21-30Vdc
- AMELEC Standard 10 year warranty
- Suitable for SIL 1, 2 & 3 rated (EN 61508) safety instrumented system (SIS) loop applications
- RIS SC8302 / 8302E / 8356 / 8358 Series Replacement Card

TECHNICAL SPECIFICATION

FUNCTION

Process input signal Converter / Isolator

INPUT

Any DC Current / Voltage can be specified in the range of:

Current up to 100mA max (Passive port)

Voltage up to 100V max (impedance 1Mohms)

Typical Input: 4 - 20nA (Passive port, impedance 10ohms)

OUTPUT

DC current or voltage specified in the range of:

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

Current up 22mA max Source configuration (Internally powered)

Voltage any up to 20V max @ up to 20mA.

Typical output range: 4 - 20mA (Active port, 800ohms max load)

Optional 24Vdc @ 22mA two-wire loop excitation (RIS 'E' option)

CONTROLS

Zero / Span: 15-turn blindest potentiometers to calibrate Output.

SUPPLY VOLTAGE

Nom 24Vdc, Buss line within RIS Rack Backplane.

TEST POINTS

I/P + O/P Test Points on Front Fascia, allows for monitoring or simulation of the input signal & monitoring of the output signal; 0-2V = 0-100% span.

(supplied with Test Plugs on flying leads)

INDICATOR

Amber Led: power **ON** indicator

PERFORMANCE

Response time: < 100mS (0-100% input step change)

Accuracy/Linearity : <±0.1% span

Input open circuit response - Downscale Drive as standard

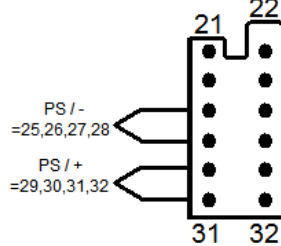
PROTECTION

Isolation 1000V RMS Input/Output/Supply
Internal Fuse.

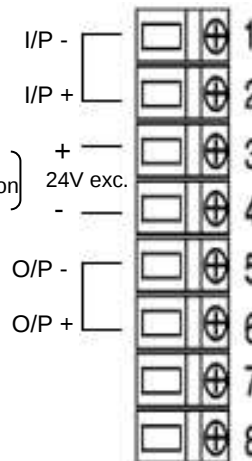
Input over range typically at 300%

Output saturation 125%

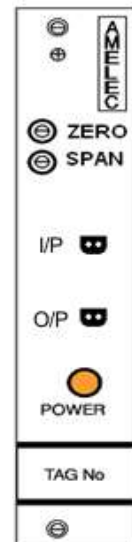
Internal 24Vdc SUPPLY BUSS



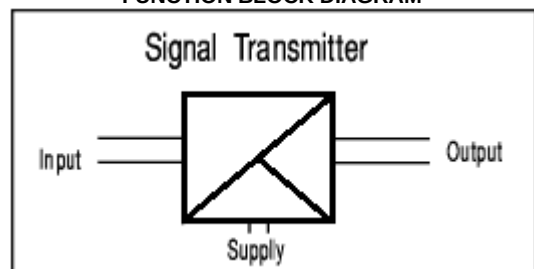
RIS Back Plate TERMINATION



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 (controlled EM)

MOUNTING / DIMENSIONS

Card with 3U high 4E wide front plate

Mounting 19" rack / 84E wide (3U High RIS 19" rack)

Card weight < 200g

ADDITIONAL OPTIONS

J: Input injection Jack, for testing purposes

M: 24Vdc 2-wire loop excitation (original RIS 'E' option)

X: Open circuit response Upscale drive