

AGS1013K Slow Frequency to Process I/V Transmitter / Isolator

- Suitable for SIL 1, SIL 2 & SIL 3 rated safety system loop applications (IEC61508)
- Suitable for any pulse/frequency inputs
- Supply voltages:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
 - 110Vdc $\pm 10\%$
- RFI protection to IEC61000-4-3:2006/A2:2010 (20-3000 MHz ≤ 10 V/m, 80-1000MHz ≤ 30 V/m)
- Amelec standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT Pulse/Frequency

Any regular pulse or repetitive waveform, minimum calibrated span of 0.5Hz (maximum 500Hz)
Input level may be anywhere between 50mV-100V pk-pk.
(Typical input: 0 to 5Hz, 500mV amplitude)

This unit measures the time interval between consecutive pulses, the inverse of this time being proportional to the input frequency.
When the unit is initially powered up the output will be at either 0% or 100%, waiting for the first pulse to arrive.

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 from 0.4 to 20V max @ up to 5mA per output.
Typical output: 4 - 20mA (Source, max load 1200ohms)

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Accuracy/Linearity: $\pm 0.1\%$ 5-40% span, up to $\pm 0.5\%$ at 100% span
Cut Off: Factory set at 5% of span as standard
Response time: Typically < 200ms
Supply consumption: < 2VA
Input open circuit response: Downscale drive as standard

PROTECTION

Isolation: 500Vdc: (Input-Output)/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)

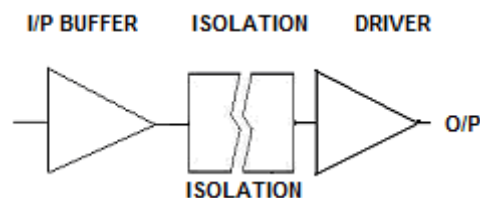
TERMINATION

(+) / ~	1
(-) / ~	2
Scn	3
	4
	5
	6
OUTPUT +	7
OUTPUT -	8
Scn	9
Earth	10
Live / +	11
Neutral / -	12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIROMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm
Mounting: DIN Rail (TS35) as standard
(Seismic / Surface keyhole plate or Front Panel mount options also available)
Weight < 500g

ADD ON / OPTIONS

J : Input injection jack socket
P: Test point (Output loop monitoring)
Non standard Power supply ranges available
DI = A 3½ digit display of the input or output in units to suit