

FREQCON-PWMI

PWM FREQUENCY TO ANALOGUE CONVERTER



- Wide range of PWM Frequency inputs
- Isolated 4-20mA or Voltage Output
- Very High Accuracy
- 3-Port Isolation to 1kV
- Low Cost of Ownership
- Ultra-Compact, only 12.5mm Wide!

Description

The FREQCON-PWMI is a PWM frequency input to analogue output converter which can be configured using switches to convert a wide range of Pulse Width Modulated inputs to isolated 4-20mA or voltage outputs.

There is a wide range of PWM frequencies available and the PWM signal can come in a lot of different voltage levels and types, for a list of these types please see opposite.

The input can be averaged over a period between 0 and 45 seconds with a quickstep option available to respond quickly to sudden changes in input frequency.

Typical applications include the conversion of a PWM output from a PLC to an isolated 4-20mA output.

The operational status of the unit is indicated by the front panel LED. There are two power supply options, the unit can be powered by any supply from 12- 36 Vdc and 12-32Vac or from 90 -264Vac.

General specifications

The inputs types and ranges included below are our standard ones only. Please contact our sales department for details on any application not specified below.

- 2-Wire Proximity
- Volt Free Contact
- Open Collector NPN or PNP
- 5V Logic TTL
- 24V Logic
- Inductive / Magnetic Pickup

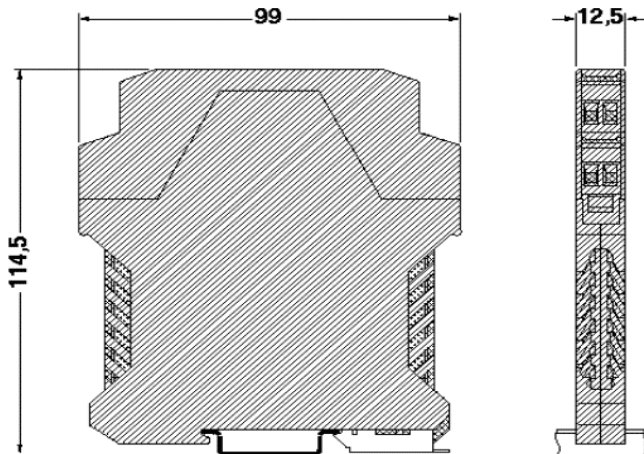
Outputs

DC Current (Source or Sink) and Voltage

0-20mA, 4-20mA, 0-10mA into 750Ω maximum.
0-1V, 0-10V, 1-5V into a minimum 100kΩ

Technical specifications

Parameter	Min	Typ	Max	Comments
Supply Voltage	12V	24V	36V	
Supply Current		110mA	134mA	Max with 22V Transmitter Supply @ 24mA
Input Voltage Logic 0	-30V		+0.1V	
Input Voltage Logic 1	+0.1V		+30V	
Frequency Resolution			1.333 μ s	
Overall Accuracy		$\pm 0.01\%$	$\pm 0.06\%$	Input to Analogue Output
Input Accuracy		$\pm 0.01\%$		
Temp Coefficient			± 50 ppm/ $^{\circ}$ C	
Load Resistance Error			± 5 ppm/ Ω	$0 < R_L < 750\Omega$ (mA Output)
Time Constant (10-90%)		50ms	60ms	
Operating Ambient	0 $^{\circ}$ C		55 $^{\circ}$ C	
Relative Humidity	0%		90%	
Isolation Voltage	1kV			
Surge Voltage	2.5kV for 50 μ s		Transient of 10kV/ μ s	
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Accuracy figures based on an ambient temperature of 20 $^{\circ}$ C. The Time Constant is dependent on which processing options have been selected and the applied frequency.			



Mounting	DIN Rail TS35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 95g
Max Terminal Torque	0.4Nm

1.	Power Input -ve
2.	Power Input +ve
7.	Input Ground
9.	Frequency Input +ve
10.	+8V or +24V Transmitter Supply
4.	Output -ve
5.	Output +ve

Please supply:	
Part Number:	II-FREQ-PWMI-6-AA-J-000
Configuration Options:	e.g. Open Collector NPN
Input Freq Range:	e.g. 0 to 100Hz
Output Type:	e.g. mA, Volt
Output Range:	e.g. 4-20mA, 0-10V
Power Supply:	-6 for 12-36 Vdc or 12-32 Vac
	-3 for 90 -264 Vac

Email: sales@industrialinterface.co.uk

Web: www.industrialinterface.co.uk



www.facebook.com/Industrial.Interface

@IndustrialInter

Industrial Interface Ltd

