

PWM to V/I Converters



P/N: PWMI-WG8-0y

(3 Sec. response time)

- y = 01 (0-5 VDC)
- 02 (0-10 VDC)
- 03 (0-20 mA)
- 04 (4-20 mA)

(100 mSec. response time)

- y = 05 (0-5V DC)
- 06 (0-10 VDC)
- 07 (0-20 mA)
- 08 (4-20 mA)
- 10 (4-20 mA) with 500 Ohm load

(200 mSec. response time)

- y = 11 (4-18 mA)

(750 mSec. response time)

- y = 09 (0.5 – 4.5 VDC)

Description:

PWM Converters provide a compact solution for converting digital pulse width modulated (PWM) signal into current or voltage. Current to PWM converters are also available.

Applications:

Industrial and machine controls

Technical Specifications:

Ordering Part Number:	PWMI-WG8-01, 02, 03, 04	PWMI-WG8-05, 06, 07, 08, 10	PWMI-WG8-11	PWMI-WG8-09
Response Time:	3 Seconds	100 mSec.	200 mSec.	750 mSec.
All specifications are typical at nominal input voltage and 25 degrees C unless otherwise specified.				
Input Specifications:				
PWM Frequency and Range	Fully isolated PWM 5 to 1,000 Hz, 0-100%	Fully isolated PWM 50 to 5,000 Hz, 0-100%	Fully isolated PWM 64 Hz, 50-90%	Fully isolated PWM 15 kHz, 0-100%
Input Voltage	Low <1.5V High >3.5V (50V max.) TTL and CMOS compatible			Low <5.2V High >6.5V (50V max.)
Input Impedance	200kOhm		200kOhm	20kOhm
Output Specifications:				
Voltage Output	Fully isolated PWMI-WG8-01, 02, 05, 06: 0-5VDC or 0-10VDC (user selectable) PWMI-WG8-09: 0.5 to 4.5VDC Active output			
Output Impedance	1 Ohm Transient protection included Short circuit protection			
Current Output	PWMI-WG8-03, 04, 07, 08: 0-20 mA or 4-20 mA (user selectable) PWMI-WG8-10: 4-20 mA, Compliance Voltage 10VDC PWMI-WG8-11: 4-20 mA (4-18 mA factory setting)			
Compliance Voltage	PWMI-WG8-01,2,3,4,5,6,7,8,9, 11: 8.8VDC PWMI-WG8-10: Compliance Voltage 10VDC			
Maximum Load Resistance	PWMI-WG8-01,2,3,4,5,6,7,8,9,11: 400 Ohms PWMI-WG8-10: 500 Ohms			
General Specifications:				
Power Supply	24VDC+/-10% Transient protection			
Reverse Polarity Protection	Provided			
Power Consumption	30 mA			
Operating Conditions	-40 to 85 degrees C (-40 to 185 degrees F) 0-95% relative humidity			
Adjustments	Span and Offset (Zero) factory configured			
Electrical connection	#12 to #22 AWG screw terminals			
Packaging	PCB is conformal coated Housing (Wieland WEG8), Polyamide 6.6 plastic, UL94V-0, DIN rail mount			
Dimensions	60.6 x 90.5 x 28.5 mm (W x H x D) 2.38 x 3.56 x 1.12 inches excluding DIN rail			
Weight	0.15 lbs. (0.07 kg)			
Protection	IP20			
Grounding	The converter provides full isolation between input, output and power. Therefore, grounding is not necessary. If grounding is desired, however, the input, output and power grounds can be tied together.			

Connections and Adjustments

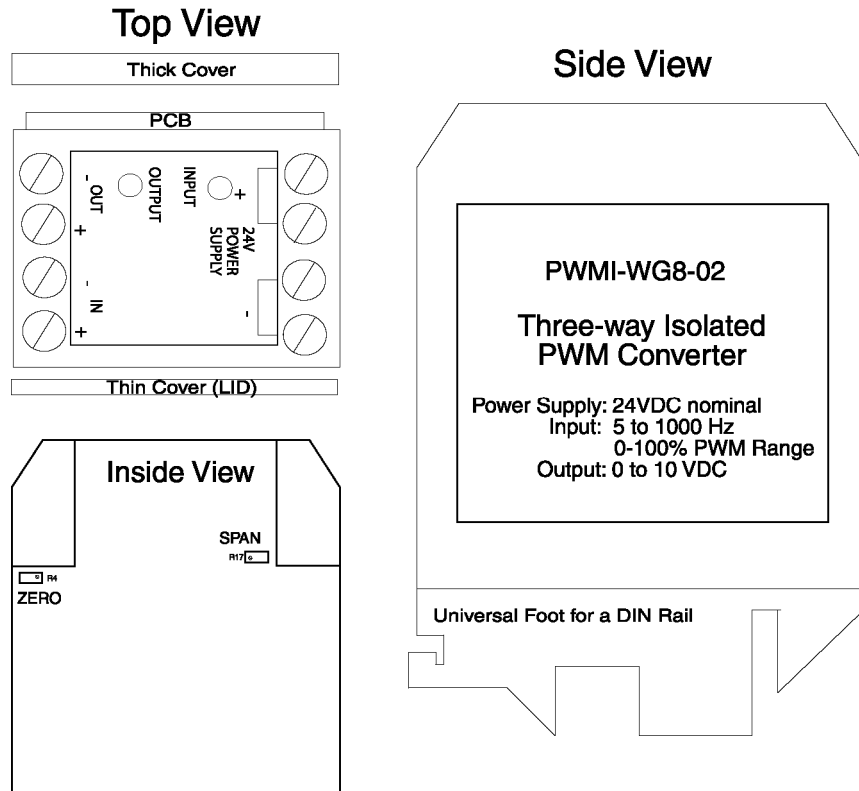
PWMI-WG8-02 is shown below (PWMI-WG8-06 is the same).

For PWMI-WG8-01 and PWMI-WG8-05, the output is 0-5VDC. For PWMI-WG8-03 and PWMI-WG8-07, the output is 0-20 mA.

For PWMI-WG8-04, PWMI-WG8-08 and PWMI-WG8-10, the output is 4-20 mA. For PWMI-WG8-11, output is 4-18 mA (factory setting).

Connections and adjustments in all cases are the same as shown below.

Span and zero is factory configured.



Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on www.axiomatic.com/service.html.

Form: TD2011AX-11/12/09