



PWM to 0-200mA
PWM to 0-20mA
0-200mA to PWM

Description: PWM Converters provide a compact solution for converting digital pulse width modulated (PWM) signal into current or voltage or current into PWM.

PWM Converters

Application:
 Industrial controls,
 mobile equipment

Technical Specifications: All specifications typical at nominal input voltage and 25 degrees C unless otherwise specified.

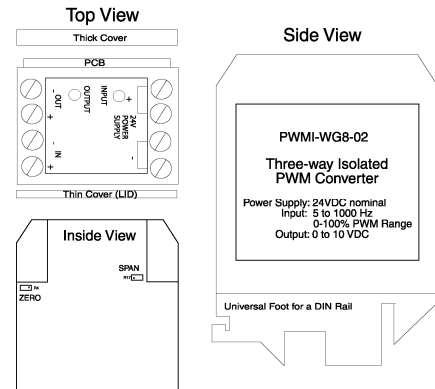
	PWM to 0-20mA	PWM to 0-200mA	0-200mA to PWM
Ordering Part Number:	PWMI-DR-20mA	PWMI-DR-200mA	IPWM-DR-200mA
Input Specifications:			
<i>Current</i>	Not applicable		Fully isolated 0-200mA
<i>PWM</i>	Fully isolated PWM frequency 485 Hz, PWM range 0-100%		Not applicable
<i>Input Voltage</i>	Low <1.5V High >3.5V (50V max.) TTL and CMOS compatible		Not applicable
<i>Input Impedance</i>	200kOhm		5 Ohms
Output Specifications:			
<i>Response Time</i>	<40 mSec.		<10 mSec.
<i>Current Output</i>	0-20 mA	0-200 mA	Not applicable
<i>Maximum Load Resistance</i>	500 Ohms (at 20 mA)	50 Ohms (at 200 mA)	Not applicable
<i>Compliance Voltage</i>	8VDC		Not applicable
<i>PWM Output</i>	Not applicable		PWM 485 Hz +/-10% 5-90% (Variable Active High) Open collector Over-current protection
<i>Output Voltage (Low)</i>	Not applicable		0.3V or less (at 1 mA) 0.7V or less (at 10 mA)
<i>Output Voltage (High)</i>	Not applicable		30V or less (at <10 mA)
General Specifications:			
<i>Power Supply</i>	24VDC (15-45VDC) with transient protection		
<i>Reverse Polarity Protection</i>	Provided		
<i>Power Consumption</i>	16 mA @24V		
<i>LED Indication</i>	Input and Output		Power OK
<i>Operating Conditions</i>	-40 to 85 degrees C (-40 to 185 degrees F), 0-95% relative humidity		
<i>Adjustments</i>	Offset (Zero) and Span Trim pots are 10 turn. CW = increasing (Offset) CCW = increasing (Span) Factory settings: 0 mA (Offset) 20 mA or 200 mA (Span)		Offset (Zero) and Span Trim pots are 10 turn. CW = increasing (Offset) CCW = increasing (Span) Factory settings: 0 mA (5% PWM) 200 mA (90% PWM) PWM output can be measured using a multi-meter (with a PWM measurement feature).
<i>Electrical connection</i>	#14-24 AWG screw terminals		
<i>Packaging</i>	DR12, DIN rail mount, 16 Amp max. current rating, Polycarbonate		
<i>Dimensions</i>	2.95 x 3.87 x 0.88 inches 75 x 98.5 x 22.5 mm (W x H x D)		
<i>Protection</i>	Encapsulated in IP40 rated housing, Terminals rated at IP20		
<i>Weight</i>	IPWM-DR-200MA: 0.45 lbs. (0.20 kg) PWMI-DR-20MA(200MA): 0.35 lbs. (0.16 kg)		

Technical Specifications:

	PWM to current/voltage (3 Sec. response time)	PWM to current/voltage (100mSec. Response time)
Ordering Part Number:	P/N: PWMI-WG8-0y (3 Sec. response time) y = 01 (0-5VDC) 02 (0-10VDC) 03 (0-20mA) 04 (4-20mA)	P/N: PWMI-WG8-0y (100 mSec. response time) y = 05 (0-5VDC) 06 (0-10VDC) 07 (0-20mA) 08 (4-20mA) 10 (4-20mA)*
Input Specifications:		
<i>PWM</i>	Fully isolated PWM frequency 5 to 1,000 Hz PWM range 0-100%	Fully isolated PWM frequency 50 to 5,000 Hz PWM range 0-100%
<i>Input Voltage</i>	Low <1.5V High >3.5V (50V max.) TTL and CMOS compatible	
<i>Input Impedance</i>	200kOhm	
Output Specifications:		
<i>Output Type</i>	Active	
<i>Voltage Output</i>	Fully isolated 0-5VDC or 0-10VDC (user selectable)	
<i>Output Impedance</i>	1 Ohm Transient protection included Short circuit protection	
<i>Current Output</i>	0-20mA or 4-20mA (user selectable)	
<i>Compliance Voltage</i>	8.8VDC (*Model PWMI-WG8-10 10.2 VDC)	
<i>Maximum Load Resistance</i>	400 Ohms (*Model PWMI-WG8-10 500 Ohms)	
General Specifications:		
<i>Power Supply</i>	24VDC+/-10% Transient protection	
<i>Reverse Polarity Protection</i>	Provided	
<i>Power Consumption</i>	30 mA	
<i>Operating Conditions</i>	-40 to 85 degrees C (-40 to 185 degrees F) 0-95% relative humidity	
<i>Adjustments</i>	Span and Offset (Zero) <i>factory configured</i>	
<i>Electrical connection</i>	#12 to #22 AWG screw terminals	
<i>Packaging</i>	PCB is conformal coated, Housing (Wieland WEG8) Polyamide 6.6 plastic, UL94V-0, DIN rail mount	
<i>Dimensions</i>	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	
<i>Weight</i>	0.15 lbs. (0.07 kg)	
<i>Protection</i>	IP20	
<i>Grounding</i>	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.	



**PWM to Current
or Voltage Converter**



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: TD2000AX-07/20/09