

TECHNICAL DATASHEET #TD2006AX
PWM to Voltage Converter
(PWM to +/- 1V)
P/N: PWMV-DR-B1V



Description: PWM Converters provide a compact solution for converting digital pulse width modulated (PWM) signal into voltage. The PWMV-DR-B1V accepts a 485Hz PWM signal (1-99%) and converts it to +/-1 Volt output. The unit is DIN rail mounted. **Off-the-shelf products and application-specific product development services are available.**

Application: Industrial controls, mobile equipment

Technical Specifications:

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

Ordering Part Number:	PWMV-DR-B1V
Input Specifications:	
<i>PWM</i>	Fully isolated PWM frequency 485 Hz PWM range 1-99%
<i>Input Voltage</i>	Low <1.5V High >3.5V (50V max.) TTL and CMOS compatible
<i>Input Impedance</i>	2.5kOhm (1K to 1MOhm optional)
Output Specifications:	
<i>Response Time</i>	<50 mSec.
<i>Voltage Output</i>	-1 to +1 Volts If no input signal is received after three PWM pulses, the output falls to 0V.
<i>Minimum Load Resistance</i>	5kOhms
General Specifications:	
<i>Power Supply</i>	24VDC (15-36VDC) Transient protection
<i>Reverse Polarity Protection</i>	Provided
<i>LED Indication</i>	Output LED is ON when PWM input pulses are not available. Output LED is OFF when output is OK. Power LED ON indicates Power OK.
<i>Operating Conditions</i>	-40 to 85 degrees C (-40 to 185 degrees F) 0-95% relative humidity
<i>Adjustments - Offset (Zero) and Span</i>	Trim pots are 10 turn. CW = increasing (Offset) CCW = increasing (Span) Apply a 50% PWM signal to the input. Adjust OFFSET potentiometer to obtain a 0mV output. Apply a 1% PWM signal to the input. Adjust SPAN potentiometer to obtain a -1V output. Apply a 99% PMW signal to the input. Adjust SPAN potentiometer if output is not +1V. Confirm 0mV offset.
<i>Electrical connection</i>	#14-24 AWG screw terminals
<i>Packaging</i>	DIN rail mount, 16 Amp max. current rating, Polycarbonate, DR12
<i>Dimensions</i>	75 x 98.5 x 22.5 mm 2.95 x 3.87 x 0.88 inches (W x H x D)
<i>Protection</i>	Circuit board conformally coated within IP40 rated housing, Terminals rated at IP20

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: TD2006AX-11/28/07