

Features:

- 1 Voltage, Current, PWM, Frequency, RPM or Counter Signal input
 (user selectable input range from: 0-5V; 0-10V; 0-20mA; 4-20mA; 0-100% PWM; 0.5Hz – 20 kHz; Pulse Counter)
- 1 CAN port (CANopen®)
- Operational 9...36 Vdc (12 Vdc or 24 Vdc)
- Integrated Deutsch IPD 6-pin connector
- Compact, fully sealed enclosure, IP67
- CE marking
- EDS File



Applications:

- Machine Control Systems

Ordering Part Numbers:

1 Signal Input, CAN Converter, 1 CANopen® P/N: **AX031701**

Accessories: Mating Plugs Kit P/N: **AX070119**

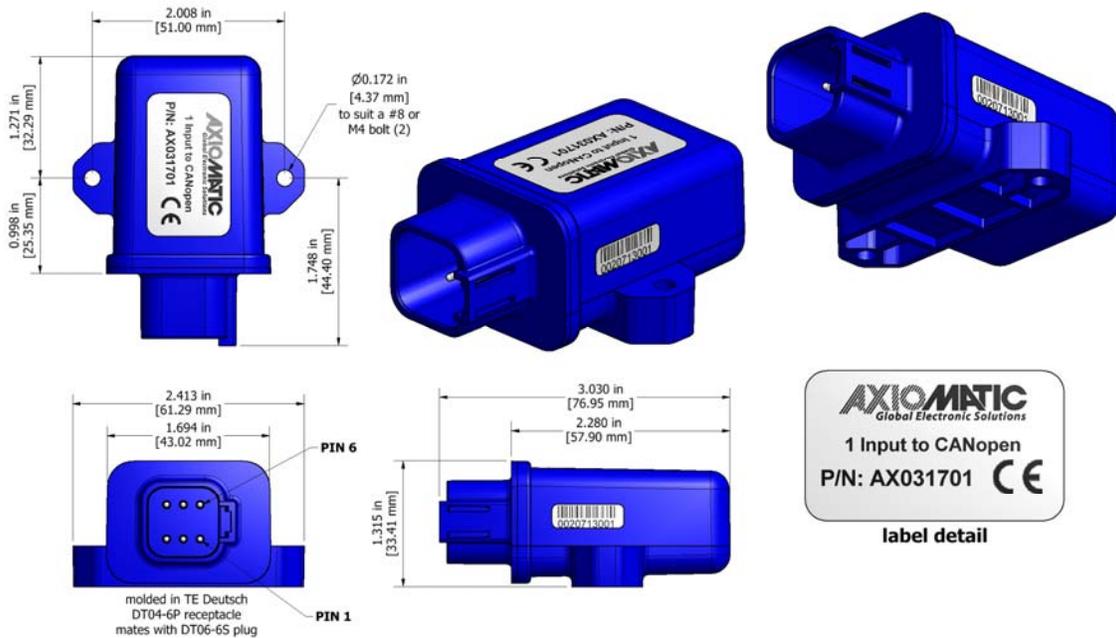


Figure 1.0 – Dimensional Drawing

Technical Specifications: Typical at nominal input voltage and 25 degrees C unless otherwise specified.

Power

Power Supply Input - Nominal	12 V or 24 Vdc nominal; 9...36 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Surge Protection	Surge Protection is provided. Overvoltage protection up to 38V is provided. Undervoltage protection is provided.
Reverse Polarity Protection	Provided

Input

Input Signal	One Voltage, Current, PWM [%], Frequency [Hz], RPM or Counter Signal Input Refer to Table 1.0.
Table 1.0 – Input – User Selectable Options	
Analog Input Functions	Voltage Input
Voltage Input	0-5V (Impedance 204 KOhm); 0-10V (Impedance 136 KOhm)
Current Input	0-20 mA (Impedance 124 Ohm); 4-20 mA (Impedance 124 Ohm)
Digital Input Functions	PWM[%], Frequency [Hz], RPM or Counter Signal Input
Digital Input Level	+Vps
PWM Input	0 to 100% at 0.5Hz to 20kHz Selectable 10kΩ pullup to +5V or pulldown to GND resistor
Frequency Input	0.5Hz to 20kHz Selectable 10kΩ pullup to +5V or pulldown to GND resistor
Counter Input	Pulse Count, Measuring Window, Pulses in Window
Digital Input Function	5V CMOS, Active High or Active Low Selectable 10kΩ pullup to +5V or pulldown to GND resistor Normal, Inverse or Latched (push-button) response
Input Accuracy	≤ 1% full scale error (all types)
Analog Input Resolution	12-bit ADC
Digital Input Resolution	16-bit timer
Analog Ground	One provided
Error Detection/Reaction	Out of Range High and Low detection EMCY code generation (object 1003h) and fault reaction possible (1029h).

Control Logic

Software Platform	User programmable functionality using SDO object access, per CiA DS-301
User Interface	EDS provided to interface to standard CANopen® tools

General Specifications

Memory	STM32F103CBT7, 32-bit, 128 Kbytes Flash Program Memory
CAN Port	1 CAN (CANopen®) SAE J1939 model is ordering part number AX031700.
Quiescent Current Draw	14 mA @ 24Vdc Typical; 30 mA @ 12Vdc Typical
Response Time	10 mSec. Typical
Operating Conditions	-40 to 85°C (-40 to 185°F)
Weight	0.10 lb. (0.045 kg)
Protection Rating	IP67
EMC Compliance	CE marking
Vibration	MIL-STD-202G, Test 204D and 214A (Sine and Random) 10 g peak (Sine); 7.86 Grms peak (Random)
Shock	MIL-STD-202G, Test 213B, 50 g
Packaging and Dimensions	Plastic Enclosure, Nylon 6-6 with 30% glass fill Integral Deutsch IPD connector, Refer to Figure 1.0 dimensional drawing.

Electrical Connections	<p>6 pin Deutsch IPD connector P/N: DT04-6P A mating plug kit is available as Axiomatic P/N: AX070119.</p> <table border="1" data-bbox="597 283 1026 527"> <thead> <tr> <th data-bbox="597 283 721 321">Pin #</th> <th data-bbox="721 283 1026 321">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="597 321 721 359">1</td> <td data-bbox="721 321 1026 359">BATT+</td> </tr> <tr> <td data-bbox="597 359 721 396">2</td> <td data-bbox="721 359 1026 396">Input +</td> </tr> <tr> <td data-bbox="597 396 721 434">3</td> <td data-bbox="721 396 1026 434">CAN_H</td> </tr> <tr> <td data-bbox="597 434 721 472">4</td> <td data-bbox="721 434 1026 472">CAN_L</td> </tr> <tr> <td data-bbox="597 472 721 510">5</td> <td data-bbox="721 472 1026 510">Input -</td> </tr> <tr> <td data-bbox="597 510 721 527">6</td> <td data-bbox="721 510 1026 527">BATT-</td> </tr> </tbody> </table>	Pin #	Description	1	BATT+	2	Input +	3	CAN_H	4	CAN_L	5	Input -	6	BATT-
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Notes: Notes: CANopen® is a registered community trademark of CAN in Automation e.V.

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: TDAX031701-11/26/19