

Features:

- 1 Voltage, Current or PWM Signal input (user selectable input range from: 0-5V; 0-10V; 0-20mA; 4-20mA; 0.5Hz – 50 Hz; 10Hz – 1 kHz; or 100Hz – 10 kHz)
- 1 CAN port (SAE J1939)
- Operational 9...36 Vdc (12 Vdc or 24 Vdc)
- Integrated Deutsch IPD 6-pin connector
- Compact, fully sealed enclosure, IP67
- Meets the environmental and electrical requirements of SAE J1445 and SAE J1113-11
- CE marking
- Configure with Axiomatic Electronic Assistant®



Applications:

- Machine Control Systems

Ordering Part Numbers:

- 1 Signal Input, CAN Converter, 1 SAE J1939 250 kbps P/N: **AX031700**
1 Signal Input, CAN Converter, 1 SAE J1939 500 kbps P/N: **AX031700-01**
1 Signal Input, CAN Converter, 1 SAE J1939 1 Mbps P/N: **AX031700-02**

Configuration Tool: Electronic Assistant® P/N: **AX070502**

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

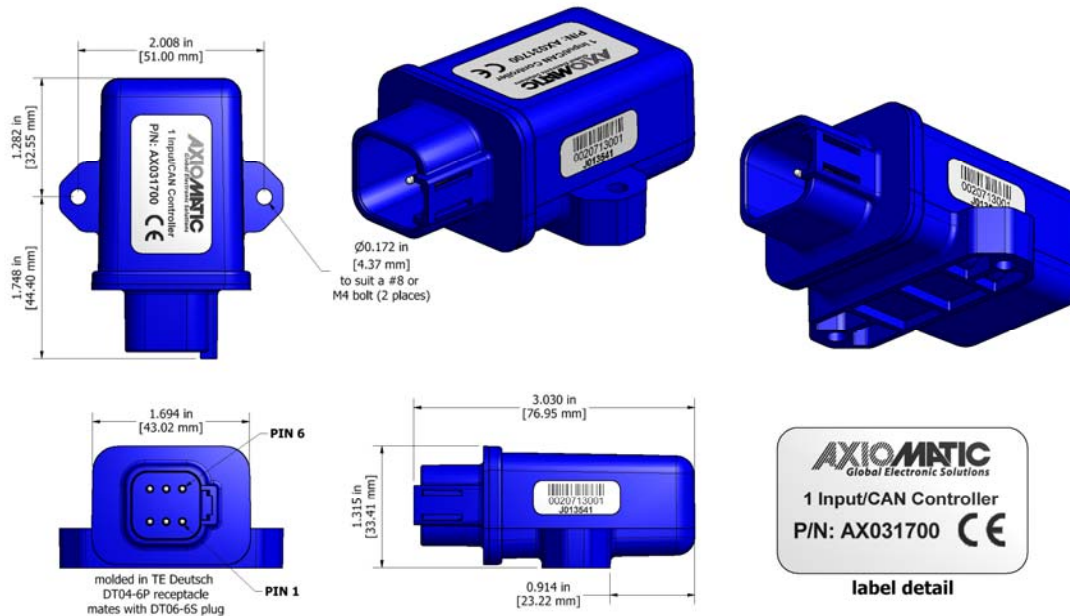


Figure 1.0 – Dimensional Drawing

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 and Load Dump	Meets the requirements of SAE J1113-11 for 24Vdc nominal input
Reverse Polarity Protection	Provided

Input

Input Signal	One Voltage, Current or PWM 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; 4-20 mA
Digital Input Functions	PWM Input
Digital Input Level	+Vps
PWM Input	0 to 100% 0.5 Hz – 50 Hz 10 Hz to 1kHz 100 Hz to 10 kHz
Input Impedance	1 MOhm high impedance, 10KOhm pull down, 10KOhm pull up to +5V
Input Accuracy	≤ 1%
Input Resolution	12-bit
Analog Ground	One provided

Control Logic

Software Platform	The Signal Converter comes pre-programmed with standard logic.
User Interface, Reflashing	Axiomatic Electronic Assistant® AX070502

General Specifications

Memory	STM32F103CBT7, 32-bit, 128 Kbytes Flash Program Memory														
CAN Port	1 CAN (SAE J1939) Model AX031700: 250 kbps Model AX031700-01: 500 kbps Model AX031700-02: 1 Mbps														
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	0.15 lbs. (0.068 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	6 pin Deutsch IPD connector P/N: DT04-6P A mating plug kit is available as Axiomatic P/N: AX070119 . <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Pin #</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BATT+</td> </tr> <tr> <td>2</td> <td>Input +</td> </tr> <tr> <td>3</td> <td>CAN_H</td> </tr> <tr> <td>4</td> <td>CAN_L</td> </tr> <tr> <td>5</td> <td>Input -</td> </tr> <tr> <td>6</td> <td>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: Electronic Assistant® is a registered US trademark of Axiomatic Technologies Corporation.
 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: TDAX031700-06/20/19