

**Converts a Magnetic speed sensor signal into SAE J1939 CAN Messages for communication with control systems**

**Features:**

- 1 Magnetic Pick-up type input for interface with a sensor
- 1 CAN port (SAE J1939) with auto-baud-rate-detect
- Operational 8...60 Vdc (12 Vdc, 24 Vdc or 48 Vdc)
- Integrated Deutsch IPD 6-pin connector
- Compact, fully sealed enclosure, IP67
- Meets the surge requirements of DIN EN 13309
- CE marking
- Configure with Axiomatic Electronic Assistant

**Applications:**

- Power Generator Set control systems
- Machine engine control systems



**Ordering Part Numbers:**

Magnetic Pick-up / CAN Converter, SAE J1939 with auto-baud-rate-detect - P/N: **AX031500**  
Configuration Tool: Electronic Assistant P/N: **AX070502**

Accessories:

Mating Plug KIT: **AX070119**

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](http://www.axiomatic.com/service.html).

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

Power Supply Input - Nominal	12 V, 24 V or 48 Vdc nominal; 8...60 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Surge Protection	Meets the surge requirements of DIN EN13309
Reverse Polarity Protection	Provided

**Input**

Input	1 Magnetic Pick-up type input Frequency Range: 0.5 Hz to 20 kHz Amplitude: 100 mVAC to 100VAC (RMS)
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**General Specifications**

Memory	STM32F103CBT7, 32-bit, 128 Kbytes Flash Program Memory																
CAN Port	1 CAN (SAE J1939) 250kbit/s, 500kbit/s, 667kbit/s, 1Mbit/s. Automatic Baud Rate Detection Model AX031501 (CANopen®)																
Control Logic	The Converter comes pre-programmed with standard logic. Configurable CAN messages via Electronic Assistant®																
Sampling Time	The input is tied to a 16-bit timer.																
Quiescent Current Draw	9.1 mA @ 24Vdc; 16 mA @ 12Vdc 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																
Enclosure 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: <b>AX070119</b> .																
	<table border="1"> <thead> <tr> <th colspan="2">CAN and I/O Connector</th> </tr> <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 GND</td> </tr> <tr> <td>6</td> <td>BATT-</td> </tr> </tbody> </table>	CAN and I/O Connector		Pin #	Description	1	BATT+	2	Input +	3	CAN H	4	CAN L	5	Input GND	6	BATT-
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User Interface and S/W Reflashing	Axiomatic Electronic Assistant <b>AX070502</b>																

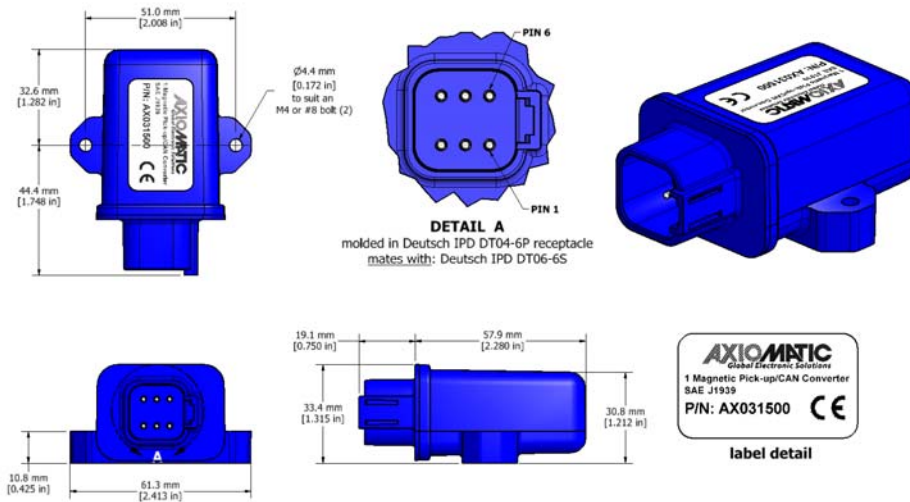


Figure 1.0 – Dimensional Drawing

Form: TDAX031500-09/28/21