

# TECHNICAL DATASHEET #TDAX06400X Laser Receiver P/N: AX064000, AX064001

The Laser Receiver has a laser detection diode array consisting of 40 diodes. The diode array is 190 mm in length and it can be configured to detect one or two independent rotating laser beams. It has multiple configuration options to suit a variety of machine applications.

### Features:

- Plexiglas lens
- 160 degree beam detection
- 190 mm (7.5 in.) beam detection height range
- Detects rotational lasers with rotation speed between 2-20 RPS.
- Detects rotational lasers within 630 nm 850 nm and 1m – 150 m
- Reports RPS of received laser beam
- Resolution 2.3 mm
- Precision 3 mm (0.1 in.) or configurable
- 8-36Vdc (12V or 24Vdc nominal)
- SAE J1939 or CANopen® models
- 40 to +85°C
- IP69K
- 2 5-pin M12 connectors
- CE marking
- Vibration and shock compliance
- SAE J1939 model includes auto-baud-rate detect functionality
- Configurable with the Axiomatic Electronic Assistant (model AX064000) or CANopen® tools (model AX064001)

**Applications:** Off-highway Equipment

## **Ordering Part Numbers:**

Laser Receiver, SAE J1939 with auto-baud-rate detect P/N: AX064000

Laser Receiver, CANopen® P/N: AX064001

#### **Accessories:**

The Axiomatic Electronic Assistant KIT (for SAE J1939 model), P/Ns: AX070502 or AX070506K

EDS File (for CANopen® model)

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

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 https://www.axiomatic.com/service/.

Power Input	836Vdc (12V or 24V nominal)
CAN Port	Model AX064000 (SAE J1939 with auto-baud-rate detect) 1 SAE J1939 250kbit/s, 500kbit/s, 667kbit/s, 1Mbit/s. Automatic Baud Rate Detection
	Model AX064001 (CANopen®) 1 CANopen®
Interface with laser beam	160 degree beam detection 190 mm (7.5 in.) beam detection height range Detects rotational lasers with rotation speed between 2-20 RPS. Detects rotational lasers within 630 nm – 850 nm and 1m – 150 m Reports RPS of received laser beam Resolution is 2.3 mm. Precision 3 mm (0.1 in.)
User Interface	The Axiomatic Electronic Assistant (P/Ns AX070502 or AX070506K) for SAE J1939 models, and to flash new firmware.  EDS file for CANopen® model AX064001
EMI Compliance	CE marking
Enclosure	Plexiglass Refer to the dimensional drawing, Figure 1.0.
Protection	IP69K
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
Weight	1.00 lb. (0.453 kg)
Temperature Rating	Operating: -40 to 85°C (-40 to 185°F) Storage: -50 to 90°C (-58 to 194°F)
Electrical Pinout	2 5-pin M12 connectors Refer to dimensional drawing, Figure 1.0.

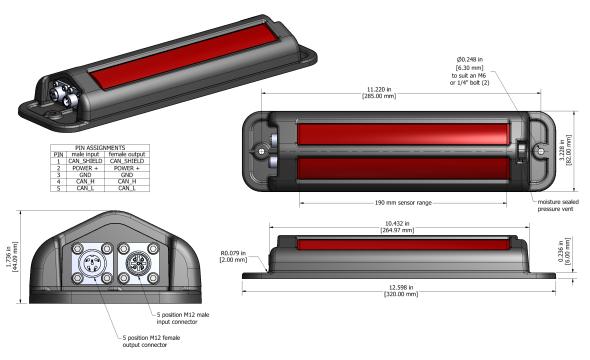


Figure 1. 0. - Dimensional Drawing - Rev P1

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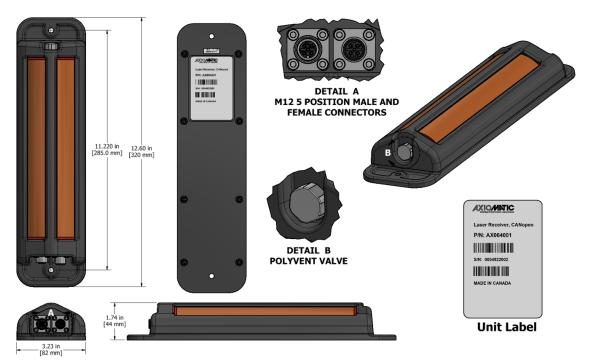


Figure 2. 0. – Dimensional Drawing, Rev P2

 ${\tt CANopen @ is a registered community trademark of CAN in Automation e.V.}\\$ 

Form: TDAX06400X-07-05-23

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