

The Laser Receiver has a laser detection diode array consisting of 40 diodes. The diode array is 190mm 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:

- Clear Plexiglas lens
- 160 degree beam detection
- 20 cm 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
- Precision 3 mm or adjustable via CAN message
- 8-36Vdc (12V or 24Vdc nominal)
- SAE J1939 or CANopen
- - 40 to +85°C
- IP69K
- 2 5-pin M12 connectors
- CE marking pending
- Vibration and shock compliance
- Configurable with Electronic Assistant®

**Applications:** Off-highway Equipment

#### Ordering Part Numbers:

Laser Receiver, 250 kbps SAE J1939 P/N: **AX180400**  
Laser Receiver, 500 kbps SAE J1939 P/N: **AX180400-01**  
Laser Receiver, 1 Mbps SAE J1939 P/N: **AX180400-02**

#### Accessories:

Electronic Assistant (Configuration Tool, PC-based and USB-CAN Converter): **AX070502**

## Technical Specifications:

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

Power Input	8...36Vdc (12V or 24V nominal)
CAN Port	SAE J1939 or CANopen®
Interface with laser beam	160 degree beam detection 20 cm 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 Precision 3 mm or adjustable via CAN message
User Interface	AX070502 Electronic Assistant®
Approvals	CE marking pending
EMI Compliance	CE marking pending for the EMC Directive
Enclosure	Plexiglass Refer to the dimensional drawing, Figure 1.0.
Protection	IP69K
Vibration	pending MIL-STD-202G, Test 204D and 214A (Sine and Random) 10 g peak (Sine); 7.86 Grms peak (Random)
Shock	Pending MIL-STD-202G, Test 213B; 50 g
Weight	0.80 lb. (0.362 kg) (preliminary)
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

### Notes:

CANopen® is a registered community trade mark of CAN in Automation e.V.

Electronic Assistant® is a registered U.S. trade mark 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](http://www.axiomatic.com/service.html).

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