

# Laser Receiver

## Specifications

|                        |  |
|------------------------|--|
| Type                   | Laser receiver module                              |
| Laser wavelength       | 400 – 1100 nm                                      |
| Measurement area       | Linear, 190 mm                                     |
| Measurement resolution | 3 mm   |
| Data output            | Detected beam position +95...-95 mm                |
| Interfaces             | RS-232<br>CANopen (SAEJ1939, DeviceNet on request) |
| Main processor         | DSP56F805 Digital Signal Processor                 |
| Program memory         | 32 kBytes NVM                                      |
| CAN bus transceiver    | Philips TJA1050                                    |
| Operating voltage      | 9 - 30V (compliant with ISO/DTR 7637 class 4)      |
| Operating temperature  | -40...+85°C (-40...+185°F)                         |
| Dimensions             | 250 x 52 x 78 mm<br>9.84 x 2.04 x 3.07 inches      |
| Protection Class       | IP65 (IP67 available on request)                   |



Also available...a Digital I/O Module with 16 inputs and 16 outputs (see Datasheet#TD6100MV) for controlling of external devices, such as warning lights and horns, and for reading additional data from other sensors.

## Product description

The laser receiver module is designed for detection of a laser beam position in one dimension. The module can detect both continuous and pulsed laser beams. The pulsed laser beam pulse interval can be set to the module's parameters. The module gives the detected position in millimeters measured from the module center line. The measurement resolution is 3 mm.

The 9...30 VDC power supply input section is tested against the very strict ISO/DTR 7637 class 4 standard. The module is available with CANopen protocol. Other CAN level protocols such as SAE J1939 are available on request. For industrial applications, DeviceNet protocol is available on request. The CAN bus node ID is changed through the RS-232 interface using normal terminal software.

The standard module includes 4-pin spring loaded connectors for power supply and CAN bus only. It is housed in a rugged cast aluminum housing with military style connectors.

## Applications

- Aligning of work machines according to a laser plane
- Height reference point calculation
- Laser beam detection – mobile equipment

## Order code

|       |   |                |
|-------|---|----------------|
| MVLRX | - | CO             |
|       |   | CAN protocol   |
|       |   | CO = CANopen   |
|       |   | DN = DeviceNet |

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