



## General Description

The Trimble® LR410 Laser Receiver is designed to be used with either the new GCS 300-600 Grade Control System or the Prinz Albert systems as a replacement for the RS2S laser receiver. Engineered for use in harsh environments, the LR410 is 100% weatherproof and features 360° laser detection. Integrated reference LEDs, located in the corner of each of the four laser receiving windows, show the laser strike location from the center of the receiver, power, and error status, for fast visual receiver status. An industry-standard CAN (SAE J1939) interface makes system integration easy.

## Standard Features

- Full 360° laser detection field of view
  - 231mm (9.1") detection window
- Linear detection position to within 1.5 mm (0.06")
  - 100% sealed and weatherproof enclosure
- Sunlight viewable LEDs indicate set up, power and errors
  - Auto-dim LED display
  - Non-rotation clamp
- Selectable on-grade accuracy from the CB420 control box
  - Industry-standard CAN (SAE J1939) interface

## System and Component Compatibility

# Specifications

# LR410 Laser Receiver

## Product Specifications

### Physical Characteristics

Size:	
Length:	292 mm (11.5")
Width:	168 mm (6.62")
Height:	213 mm (8.38") including clamp
Weight:	<2.8 kg (6.3 lb)
Mounting holes:	9.5 mm (0.374") diameter (4 holes)
Mounting clamp:	Fits round masts 1.5" to 1.93" OD or square masts 1.5" to 1.75" OD

### Environmental Characteristics

Temperature:	
Operating:	-40°C to +71°C (-40°F to +160°F)
Storage:	-55°C to +85°C (-67°F to +185°F)
Humidity:	100% fully sealed, weatherproof
Sealing:	Environmentally sealed to 34.48 kPA (5 psi) IP68
EMC:	
Emissions:	Compliant with CE (ISO 13755)
Susceptibility:	Compliant with CE (ISO 13766)

### Technical Specifications

Electrical Input Voltage:	9 to 30 VDC
Current Draw (maximum):	
Current Draw (typical):	
Operating Current:	500mA maximum @12 VDC
Maximum Detection Range	
Control Interface:	CAN (SAE J1939)
Reverse Voltage Protection:	Yes, to -36 VDC
Load Dump Protected:	Yes, compliant to ISO 7637-1 and 7637 specific
Short Circuit Protected:	
Laser Transmitter Speed:	270 to 1320 RPM
Laser Beam Acceptance Angle:	360°
LED Brightness:	Auto-dimmed

### Control Dead Bands

**GCS 300-600 From Center / P.A. System (7 Channel) / P.A. System (5 Channel)**

On Grade	Adjustable from Operator Interface / $\pm 4.5$ mm ( $\pm 0.015'$ ) / $\pm 4.5$ mm ( $\pm 0.015'$ )
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### Characteristic – Laser Receiver

Laser reception angle range – azimuth:	360°
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### Connector:

MIL-C-5015

Specifications subject to change without notice.

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