



**Adjustable
line
length**

**Green,
Red or Blue
color**

**Projection
angle
30° ~ 110°**

Class 3R

Delta Field Las

Powerful laser projector for the projection of road markings in the industry. Delta Field Las Series is a laser projection system for line projection with multifunctional industrial applications. It is easy to install and adjust, with the capability to adjust the length of the projection line and to adjust the line thickness in advance. The Delta Field Laser is classified as a 3R laser class. It is ideal for industrial applications that require a sufficiently powerful laser to project bright lines over long distances. It is safe enough so special safety goggles are not needed. Delta Field Laser Series is available in Green color 520-530nm, Red color 638nm, Blue color 445nm.

FEATURES

- Laser power up to 1500mW
- Protection rating IP67
- Installation in the open or inside buildings
- Solid enclosure
- Bright and saturated line
- Easy to install
- Precise mount, rotatable at 360°
- Heating control
- Opto-isolated laser on/off control

APPLICATIONS

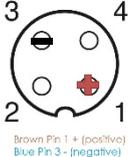
- Replacement of traditional zones or painted paths
- Creation of lines in applications where tape or paint do not work (dusty, cold, dirty work areas)
- Definition of pedestrian and forklift areas
- Securing of overhead cranes and zones
- Definition of areas for semi-trailer docks



Technical specifications

Wavelength (nm)	530±5	638	450±5
Laser power (mW)	≤800, ≤1000	≤1200	≤2000
Laser class	3R	3R	3R
Technology	Diode	Diode	Diode
Operating temperature	-40°C ~ +40°C	-40°C ~ +40°C	-40°C ~ +40°C
Storage temperature	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Expected lifetime (MTTF)	>20,000 hour	>20,000 hour	>20,000 hour
Warranty	12 months	12 months	12 months

Electrical specifications

Input voltage	9 – 24 V DC
Input current	2000mA, max
Input M12 connector	 <p>Pin 1 + (12 – 24V DC) Pin 3 – (12 – 24V DC) Pin 2 opto-isolated laser on/off + Pin 4 opto-isolated laser on/off -</p>
Temperature protection	Yes
Electrical protection	polarity reversal, overvoltage protection
Connection	M12, 4pin Industrial connector, IP67
Power cable length	5m/10m/15m/20m (on request)

Optical specifications

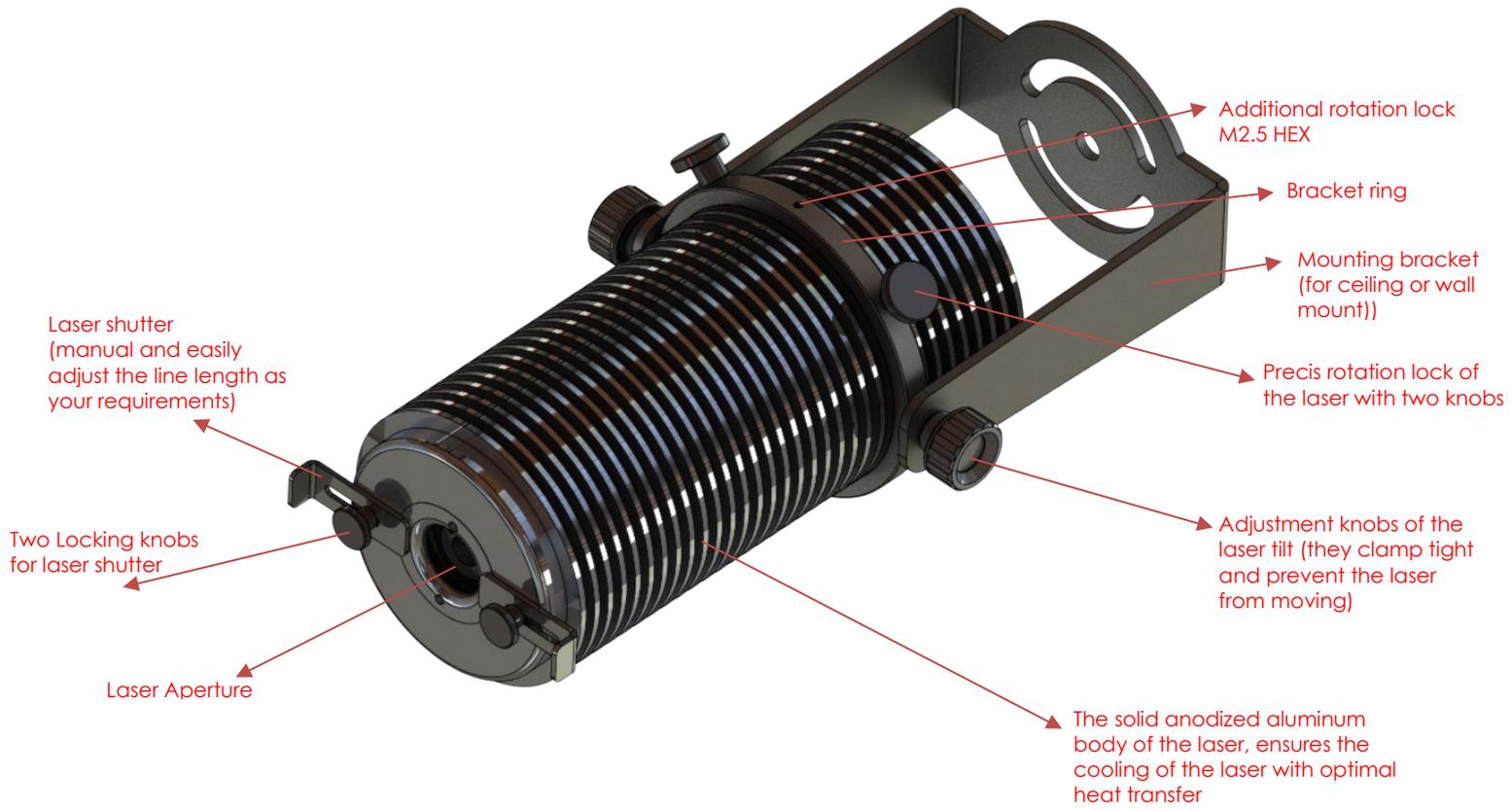
Projection lens	Angle 30 °, 45 °, 60 °, 90 °, 110 ° (on request)
Focus	manual (on request)
Line thickness	10 ~ 70mm
DOE projection	Warning Sign, Stop Sign, Circle, Cross, Grating, Square (on request)

Mechanical specifications

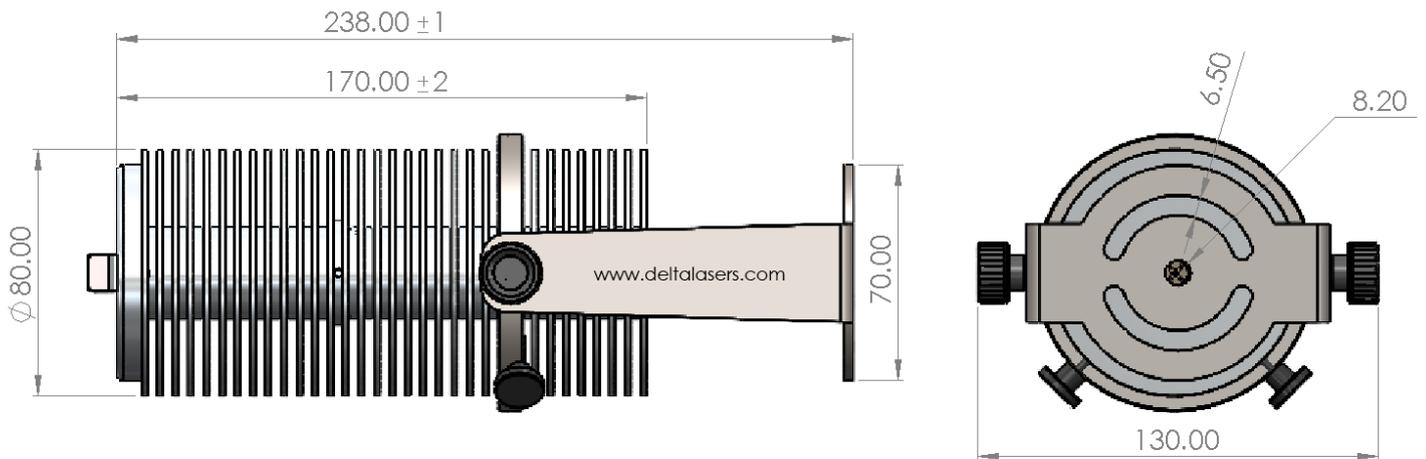
Dimensions (mm)	Ø80 x 175±5
Weight	1,7 kg
Protection rating	IP67



Drawing specifications



Physical size





User manual

Attention:

This product guide contains important information for the safe installation and use of this product. Please, read and follow these instructions carefully. Keep this manual in a safe place for future reference.

Safety warning:

Class III R Laser Product - Avoid direct prolonged eye exposure (do not stare directly at the beam).
Nominal distance for eye safety - 2 meters (take care when installing at close distances).

When unpacking and before discarding the carton packing, please check for any shipping damages before using the product. If there is any damage caused by transportation and transit, please consult the manufacturer immediately and do not use it. Failure to do so will void your warranty.

Instructions

- The product should only be installed, operated, maintained and connected to the electrical power grid by qualified, trained personnel.
- Before installing, examine all power requirements to make sure that the voltage and frequency of the power supply correspond to the power required by the product.
- Do not connect this unit to any type of dimmers or at close range. Do not project laser light directly onto reflective materials such as glass, mirrors, metal objects, etc.
- Avoid direct and prolonged exposure of the eyes to laser light. Do not stand or look at the laser light at any distance. Laser light can be harmful to the eyes at close range and prolonged exposure. The Delta Field Las industrial laser is a professional tool designed to replace traditional road marking, not a toy.
- When installing the laser projector, please be sure to follow the installation instructions carefully and secure firmly all parts, including any screws, grips, etc.
- Keep the laser projector body and the front glass-covered aperture clean at all times. Use only cotton swabs (dry or moistened with clean medical-grade alcohol or water) to clean the glass. Do not use other cleaning fluids to clean the glass.
- When cleaning, wipe several times in one direction, and then repeat the movements in a perpendicular direction. If the internal optics get dirty, consult the manufacturer.
- Please do not attempt to disassemble and/or alter the internal structure of the product. Opening the device housing will void your warranty and expose you to Class IV laser radiation.
- If any part of the laser projector becomes damaged, stop using it immediately. All repairs must be carried out by qualified personnel. If the product is within the warranty period, contact the manufacturer for repair or replacement.
- If the red LED above the laser projector glass turns red, this indicates the connection of input voltage to the laser.
- If the laser beam is off, this means that the operating temperature is too high or too low and the electronic control of the laser diode has switched to protective mode. Do not use the system if the ambient temperature is higher than 45 °C or lower than -15 °C.
- If the laser is not used, the storage temperature should be from -40 °C to + 85 °C and the humidity level should be maintained from 20% ~ 90% relative humidity.

Special notes:

- Laser radiation is dangerous to human eyes if the exposure is direct and prolonged. Avoid staring directly at the beam at close range.
- Remember to install the laser projector correctly. Damage during the installation will void the factory warranty.
- As with any light source, when the laser projector is operating, it generates heat. Keep away from all flammable or combustible materials.
- DO NOT directly observe the laser light with any optical devices such as binoculars.
- This product comes with a factory warranty of 1 year. Outside this period, we provide paid services for the maintenance or replacement of spare parts. Force majeure cases or user errors are not covered.

Laser installation:

- Attach the laser to the appropriate place using the laser mount.
- The attachment is done by means of bolts with a diameter of 8 - 10 mm and suitable washers.
- The distance from the laser to the surface on which the line is projected should be at least 4 meters.

Connection to the electrical power grid:

- Observe the standards set by the utility company.
- Grounding of the appliance is required by law.
- Disconnect the plug from the mains socket before performing any maintenance operations.
- If necessary, the power cord must be replaced with a cord of the same type that can be supplied by the Support Center. The replacement must be performed by a qualified technician.



Warranty card

- The present warranty conditions apply to defects that have occurred as a result of the normal operation process during the warranty period and do not in any way limit the applicable laws and other mandatory provisions in the Republic of Bulgaria.
- Delta Lasers Technology Ltd. undertakes at its own expense to remedy all manufacturing defects of the products sold by it, which occur during the warranty period.
- The warranty period starts from the date of sale and is indicated in the record of handover or the invoice.
- Repairs during the warranty period are made only after a copy of the record of handover or the invoice has been submitted and the product has been complemented with all accessories and cleaned.
- The warranty period does not run during the repair time in the support center.
- During the repair time in the support center, the manufacturer is not obliged to provide a substitution unit.
- The repair time depends on its complexity and the delivery of spare parts, the maximum being one month and the minimum not less than 24 hours from the date of acceptance for repair. All repairs are carried out at the manufacturer's support center.
- Unless otherwise agreed, all tests and repairs of the returned products and devices are performed in the support center of DELTA LASERS TECHNOLOGY LTD. Shipping costs to and from the service center are at the customer's expense.
- **IF THE PRODUCT IS FOUND TO WORK NORMALLY, THE CUSTOMER PAYS A DIAGNOSTIC FEE.**
- After the repair is completed, the customer is notified by an e-mail or a phone call.

Claims

- Claims are accepted with a copy of the product purchase document, invoice or record of handover, and a warranty card.
- Defects due to transportation, improper storage or installation, malfunctioning or fluctuations in the power supply (electric shocks), natural disasters, mechanical shocks or defects in products with an expired warranty period are fixed at the expense of the customer after his prior consent. .

Warranty disclaimer

The customer may lose his warranty rights in the following cases:

- When connecting the device to starters or three-phase motors.
- When unauthorized personnel tries to repair the device
- When the requirements for transportation, storage, installation and operation of the purchased product are not met.
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- Damaged overall appearance, mechanical damage to the laser body.
- Visible damage to electronic components.