

DELTA PathLine Series

industrial laser projectors

PRODUCT DATASHEET

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Possible beam options:



Line

Arrow







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Dust & Water Protection | 5 V | LD Technology | Li-Ion Battery | Line | Arrow | Definition of Safety Areas | Emergency Exit Signs

DELTA PathLine Series

The Delta PathLine is an industrial laser projection module intended for emergency exit indication and safety path marking. The unit operates on 5V DC input and features an integrated rechargeable battery for backup. In case of power loss, the laser automatically switches to battery power and can project continuously for up to 2 hours. The laser can display a directional arrow or linear marking, depending on the selected optical configuration.

Delta PathLine features a compact industrial-grade enclosure with IP67 protection, ensuring reliable operation in dusty and humid environments.

The system offers two selectable modes – Safety Lighting Mode and Constant Operation Mode – enabling integration into emergency and continuous safety systems. It is designed for permanent installation in facilities requiring defined emergency routes and visual safety markings.

SKU:/ Order Code

Model	Wavelenght	Optical Power	Operating Modes	Projection Profile	Projection Optics
DL-PL	XXX	XXX	XX	XX	XX
SKU: DL-PL-520-200-SM-A1					

Overview

- Industrial laser projection module
- 5V DC input power supply
- Integrated rechargeable battery (2100 mAh)
- Up to 2 hours battery backup operation
- Automatic switching between mains and battery power
- Two operating modes
- 4-pin M12 connector interface
- Compact industrial-grade enclosure
- Protection rating: IP67

Applications

- Emergency exit direction indication
- Evacuation route marking
- Floor-level safety path guidance
- Backup visual indication during power failure
- Warehouse and logistics safety marking
- Industrial production area exit indication
- Temporary safety routing in construction sites
- Replacement of physical floor markings in high-traffic zones

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Technical Specifications

Wavelength, nm	520	638
Optical power, mW	≤200	≤300
Laser class	2M	2M
Technology	Diode	Diode
Operating temperature, °C	-10 ~ +60	-10 ~ +65

Electrical Specifications

Input voltage	5V DC, (PSU APV-12-5, 100–240V AC)
Battery Capacity	Li-ion 2100 mAh
Operating time on battery	~ 2 h
Battery charging time	12h ~ 24h
Electrical isolation	Potential-free housing
Connection	4-pin M12 connector, Cable length: 2m
Input voltage polarity	Input voltage polarity: PIN 3 Blue color (–) PIN1 Brown color (+)
Battery Enable Input	Battery Enable Input: PIN 2 / PIN 4

Operating Modes

1. Safety Lighting Mode *(SM)

In Safety Lighting Mode, the laser remains OFF while input voltage is present. When the input voltage is interrupted, the unit automatically switches to battery power and activates the projection. The laser continues to operate until the input voltage is restored or the battery capacity is depleted. When the input voltage returns, the laser turns OFF and the battery charging process begins. The LED indicator displays the battery charging status.

2. Constant Operation Mode *(CM)

In Constant Operation Mode, the laser remains ON while input voltage is present. In the event of power loss, the unit automatically switches to battery power without interruption of the projection. The laser continues to operate until the input voltage is restored or the battery capacity is depleted. When the input voltage returns, the laser remains ON, and the battery charging process begins. The LED indicator displays the battery charging status.

Important Notes:

*(Battery operation is enabled by shorting PIN 2 and PIN 4)

*(Do not apply external voltage to PIN 2 or PIN 4)

*(Always use the original 4-pin M12 connector supplied with the unit)

LED indicator:

- On: battery is charging;
- Off: battery is charged or there is no input voltage;
- Blinking: there is a problem with battery charging.

Optical Specifications

Projection profiles	*(A1) Arrow , *(B2) Line
Uniform line	*(PL) 60°, 90°, 110°
Focus	Fixed focus
Arrow Projection Size	*(A1) Projection

Arrow Projection Distance & Size

Projection Distance, m	2	3	4	5	6
Width, mm	380	580	780	980	1180
Height, mm	410	680	950	1220	1490

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Drawing Specifications

All sizes are in mm *(inches)*.





Mechanical Specifications

Dimensions	207 mm x 109,5 mm *8.15 in x 4.31 in*
Weight, g	500
Material	Anodized aluminum
Protection rating	IP67

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Views







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