

ZLP1

DATASHEET

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Model ZLP1

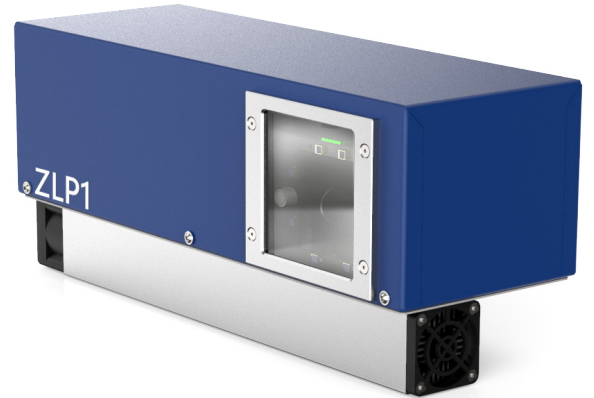
Compact, powerful, and easy to use

ZLP1 is a cost effective entry to laser projection. It is the smallest laser projector in the Z-LASER ZLP family.

ZLP1 is directed to 2D and 3D applications like pick-and-place, logistics and workstations. Enlarge and optimize your production or workflow by this easy to use laser projection system. ZLP1 is eye-safe (laser class 2M) and covers working fields from 1.0 m x 1.0 m up to 3.5 m x 3.5 m. Possible working distances range from 1.0 m to 3.0 m.

We offer our own software ZLP-Suite, which has an intuitive software interface with many customizable options and as a result customers can adapt the settings according to their specific application. Furthermore, ZLP-Suite can be upgraded with additional software modules. Thanks to its numerous connectivity options the laser projector can be operated through various software interfaces such as C++, C#, Python or even with Microsoft Excel and Microsoft PowerPoint.

Ask Z-LASER for OEM integration.



Intuitive software



Optical angle 60°



Optimized for 2D and 3D projection



Integration into multiprojector systems



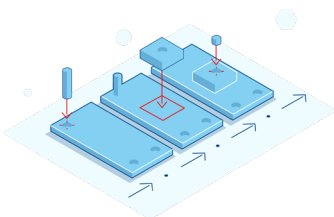
Active or passive cooling system



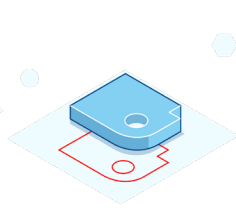
IP54

Highlights

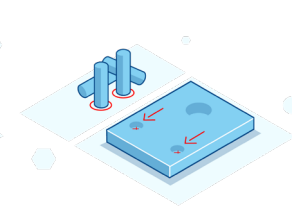
- Cost-effective laser projection system
- Easily operable via a variety of software interfaces
- Projection of 2D and 3D objects
- Optimized for interactive learning applications and workstations
- Easy integration into multi projection systems
- Data transmission via ethernet
- Passive or active cooling



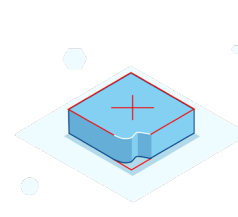
Assembly Assistance



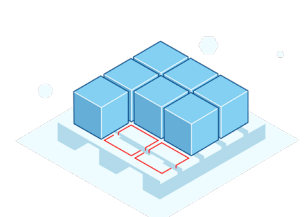
Put-to-Light



Pick-and-Place



Quality Control



Logistics

System specifications

| | | |
|--|--|--------|
| Laser source | Red or green laser diode | |
| Wavelength | 520 nm | 638 nm |
| Output power | 5 mW ⁽¹⁾ | 5 mW |
| Laser class (on EN 60825) | 2M | 2M |
| Fan angle | 60° x 60° | |
| Accuracy ⁽²⁾ (depends on projection distance) | 3 mm/m | |
| Working distance (fixed focus at 2 m) | 1 m up to 3 m | |
| Frequency of projection | Max. 50 Hz (depends on the projection) | |
| Weight | 3.4 kg (plus ca. 1.4 kg for separate power supply) | |
| Dimensions (L x W x H) | 314 x 111 x 96 mm (137 mm incl. fan) 12.36 x 4.37 x 3.77 in (5.39 incl fan) | |
| IP protection class | IP54 | |

Software / handling

| | |
|-----------------|--|
| Software | ZLP-Suite |
| SDK | C++, C#, Python VBA (Excel, PowerPoint) |
| Graphics format | HPGL / HPGL 3D |

Accessories

| | |
|----------------------|---|
| Optional accessories | Remote control, power supply, glass reflectors, mounting, binder plug |
|----------------------|---|

Electrical specifications

| | |
|-----------------------------|----------------------------|
| Operating voltage | 24 VDC ±10% |
| Protection class electrical | 3 (protective low voltage) |
| Interfaces | Ethernet TP |
| Power consumption (typical) | 40 W - 70 W (max. 100 W) |

Ambient Conditions

| | |
|--|---|
| Operating condition | +5 °C up to +40 °C (with passive cooling) +5 °C up to +45 °C (with active cooling) |
| Storage temperature | -5° C up to +60 °C |
| Humidity (max.) | < 80% relative, non-condensing |
| Working range in relationship to the mounting height (in mm) | Optical angle 60° (in mm) |
| 1.000 | 1.155 |
| 1.500 | 1.732 |
| 2.000 | 2.309 |
| 2.500 | 2.887 |
| 3.000 | 3.464 |

⁽¹⁾ (TÜV CDRH certified nominal at beam exit)

⁽²⁾ (At 32° C block temperature, optical angle 60° and 0° inclination)