Z-LASER

Intelligent Solutions in Light

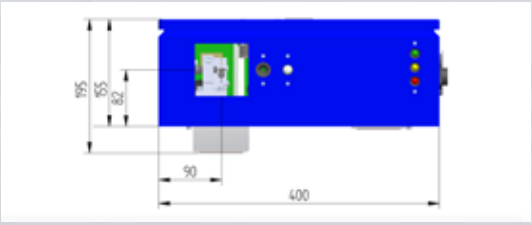
LP-HFD

- » Fast and stable projection with high repetition rate (50Hz)
- » Optimised for 3D objects
- » High beam performance due to usage of fiber-coupled laser
- » Highest accuracy of projection
- » Wide optical angle (80° x 80°) allows bigger working sites
- » Optional extendable air cooling
- » Multi-projection system for huge and complex projections
- » Serial or Ethernet data communication

Concrete
Composites
Automotive
Wood
Logistic
Stone
Textile

TÜV SÜD ISO 9001

LP-HFD



Mechanical specifications	
Dimensions	400mm x 300mm x 155mm (195mm including fan)
IP rating	IP40
Weight	12kg
Electrical specifications	
Supply voltage	90 to 265VAC
Frequency	50 / 60Hz
Power consumption	Standby: < 55W In operate: < 170W
Interfaces	RS-232 / V24 (10m), Optical fiber / RS-485, Ethernet TP, 100 Base TX or cable
Software	LPM
Format of graphics without LPM	HPGL / HPGL 3D
Optical specifications	
Laser source	Fiber-coupled red or green laser diode
Wavelength	520nm, 638nm
Output power	15mW / TÜV CDRH cerified 7mW
Accuracy (typical)	0.5mm/m mounting height (at 23°C, optical angle 70° and 0° slope)
Fan angle/axis	Max. 80° x 80°
Refresh rate	50Hz (reference test image quad.plt)
Optical resolution	1/812 calculative (at 80° fan angle)
Projection	Any polygons
Environmental conditions	
Case temperature	Min. 5°C
Passive cooling	Max. 40°C
Active cooling (optionally)	Max. 45°C
Humidity	< 80% relative, non-condensing
Working range in relationship to the mounting height	
Distance from the projector to the top edge of material (mm)	Optical angle 76° (mm)
1,000	1,562
2,000	3,125
3,000	4,687
4,000	6,250
5,000	7,812
6,000	9,375
7,000	10,938
8,000	12,500
9,000	14,063

CE-Conformity according to the directives 2004/108/EC and 73/23/ECC excluding connection type.

Order code

LP - HFD - X - X - X - X

Angle
Optic
Wavelength
Power
Product family name

Accessories

Cardanic mounting

The cardanic mounting holds laser projectors being able to freely rotate them independently of their position or movement. A flexible, simple and stable industry standard.

Extendable air cooling

At higher temperatures, an extendable air cooling, lowering the projectors temperature to the desired point, can be used to achieve a constant projection and extend the projector‘s lifetime.

Cable or wireless remote control (866 MHz)

Can be used with LP-HFD red and LP-HFD green. Some commands can be: „Calibrate laser“, „Next and previous Pen“, „Change of projection image“, „Rotation“ and „Adjustment“. Transmission distance approx. 30m.

Glass reflectors

Used for the drift compensation and referencing the laser systems. Exact adjustment of the laser to the operating area at mechanical and thermal effects.

Industrial PC-Cabinet

This robust industrial PC-Cabinet is especially designed for a rough industry use. Besides the control computer, also the network panel with single on/off switches for the projector are integrated. Optionally the PC-Cabinet can include an independent power supply (UPS) and a water cooling for the projector (as in picture above).

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