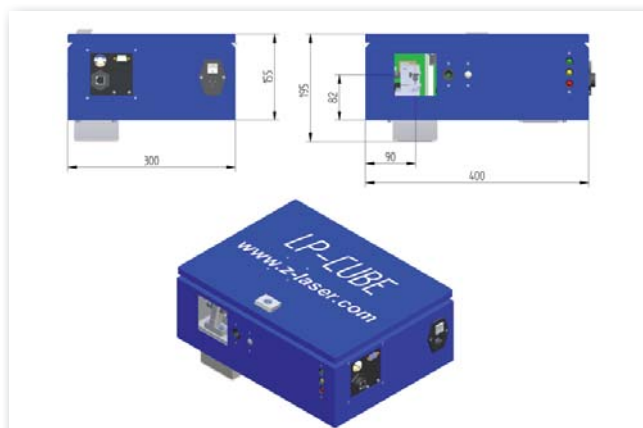


# LP-CUBE

## 2D / 3D laser projector

**Z-LASER**

- Refresh rate: 50Hz
- Optional additional air cooling
- High projection accuracy: 0,5 mm per 1m projection distance



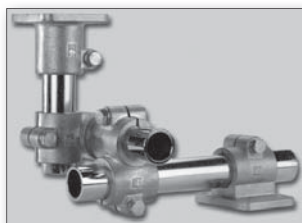
<b>Housing</b>	Dimensions (mm)	400 x 300 x 155 (195 including fan)
	Protection class	IP 40
	Weight	10 kg
<b>Voltage</b>	Input voltage	95/240 VAC, 50-60Hz
	Power consumption	<ul style="list-style-type: none"> <li>• Standby: &lt; 55W</li> <li>• In operate &lt; 170W</li> </ul>
<b>Data transfer</b>	Type of connection	Ethernet / Serial
	Serial (without converter)	RS232 / V24 (10m)
	Serial (with converter)	optical fiber / RS485
	Ethernet	Ethernet TP, 100 Base TX, cable or WLAN
	Software	LPM
	Format of graphics without LPM	HPGL
<b>Laser</b>	red	modulatable diode laser red, 635nm ± 5nm
	green (optional)	modulatable DPSS laser green, 532nm
	Output power	7mW nominal (vertical beam outside the housing)
	Laser class	2M (3A)
<b>Projection</b>	Accuracy of projection (typical) passive cooling	0,5mm/m mounting height (at 23°C, optical angle 70° and 0° slope)
	Optical angle/axis	max. 80° x 80°
	Refresh rate	50Hz (Reference test image quad.plt)
	Optical resolution	1/812 calculative (at 80° fan angle)
	Projection	arbitrary polygons, limited to 5 objects or 21 lines
<b>Conditions for installation</b>	Working temperature	min. 5°C / 41° F
	Passive cooling	max. 40C / 104°F
	Active cooling (optional)	max. 45°C / 110°F
	Humidity	< 80% relative, non condensing

**Included in delivery:** Laser projector, 2m power cable with Euro plug, 4 glass reflectors in aluminium, Software LPM, digital user manual

## Working range in relation to the mounting height

Distance from the projector to the top edge of material (mm)	Optical angle 76° (mm)
1.000	1.562,57
2.000	3.125,14
3.000	4.687,71
4.000	6.250,29
5.000	7.812,86
6.000	9.375,43
7.000	10.938,00
8.000	12.500,57
9.000	14.063,14

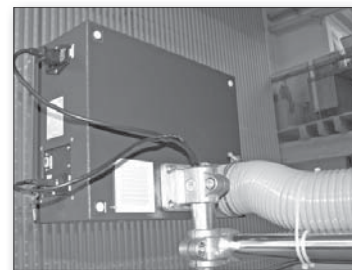
## Accessories



### Cardanic mount

Cardanic mount for a flexible positioning along all three directional axes. Flexible, simple, stable, industrial standard.

### Extendable air cooling



### Data transfer via optical fibre (LWL set)

At distances over 15m a connection via optical fibre is strongly recommended if the LP HFD is controlled via RS232. Additional advantages: fast data transfer, no data loss, good shielding against magnetic fields.



### Installation kit

contains: 1 Cardanic mount, 2 Patch cables, 1 Crossover cable, 1 Ethernet mini - HUB, 1 tube (600mm), 1 set reflectors.



### Cable or wireless remote control

Can be used with LP-CUBE red and LP-CUBE green. Some commands can be: „Calibrate laser“, „Next and previous Pen“, „Change of projection image“, „Rotation“ and „Adjustment“. Transmission distance approx. 30m with wireless control absolutely precise shift of the projection etc.



### Glass reflectors

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

### Industrial PC cabinet

Optional with UPS.

