

ilumLAS HP

622 nm - 1850 nm industrial grade lasers

Model Name	Wavelength (nm)	Optical Power (mW)
ilumLAS HP 622	622	110
ilumLAS HP 627	627	190 - 260
ilumLAS HP 630	630	190 - 300
ilumLAS HP 635	635	220 - 900
ilumLAS HP 645	645	190 - 300
ilumLAS HP 650	650	750
ilumLAS HP 660	660	220 - 750
ilumLAS HP 665	665	220 - 1200
ilumLAS HP 680	680	300 - 1350
ilumLAS HP 690	690	300 - 820
ilumLAS HP 730	730	1500 - 3000
ilumLAS HP 750	750	1120 - 3750
ilumLAS HP 760	760	1500 - 4500
ilumLAS HP 780	780	900 - 2250
ilumLAS HP 792	792	2250
ilumLAS HP 808	808	900 - 6000
ilumLAS HP 830	830	1200
ilumLAS HP 860	860	750 - 5000
ilumLAS HP 885	885	1900 - 3800
ilumLAS HP 900	900	1500
ilumLAS HP 915	915	2250 - 3800
ilumLAS HP 940	940	2250 - 3800
ilumLAS HP 980	980	1100 - 3800
ilumLAS HP 1064	1064	1100 - 3800
ilumLAS HP 1120	1120	900 - 3000
ilumLAS HP 1210	1210	900 - 1500
ilumLAS HP 1350	1350	1100 - 3800
ilumLAS HP 1450	1450	1900
ilumLAS HP 1470	1470	3800
ilumLAS HP 1550	1550	600 - 1500
ilumLAS HP 1620	1620	600
ilumLAS HP 1850	1850	750



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Optical Specifications

Wavelength	622 nm - 1850 nm
Angle of line*	10°, 20°, 30°, 45°, 60°, 75°, 90°
Beam shape*	point or line
Focus length*	100 mm to infinity
Optical power stability	± 5%

*factory adjusted

Electrical Specifications

Supply voltage	12V ± 10%
Supply current	model dependent
Laser diode operating temperature	25°C ± 1°C, TE regulated
Laser driver	APC with current limiter
Laser drive modes	CW, optional: analog modulation up to 10 kHz
CW laser startup delay	5 s

Mechanical and Environmental Specifications

Dimensions laser head	l 100 mm, w 40 mm, h 40 mm (with point optics) l 111 mm, w 40 mm, h 45 mm (with line optics)
Dimensions laser controller	l 230 mm, w 125 mm, h 47 mm
Cable length	0.6 m (from laser head to laser controller)
Weight laser head	600 g
Weight laser controller	1400 g
Operating temperature	0°C to + 35°C*
Storage temperature	- 20°C to + 50°C

*higher temperatures available

Control and Monitoring

Analog control	system on / off, laser on / off
Analog monitoring	laser state, interlock state, errors (laser overcurrent, supply voltage not ok, laser secured against being switched on again), LD temperature, base plate temperature laser head and laser controller, PD current, LD current
Interface connector	HD sub 15 pin female

Laser Safety

Shutter	yes, mechanical
Interlock terminals	2, with 2 positions each, Phoenix Contact 3.5 mm
Key switch	yes
Secured against being switched on again	yes, after errors
µC Monitoring	LD current, LD temperature, internal and external supplies, key position, interlock state

Subject to technical modifications. As per February 2016.

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