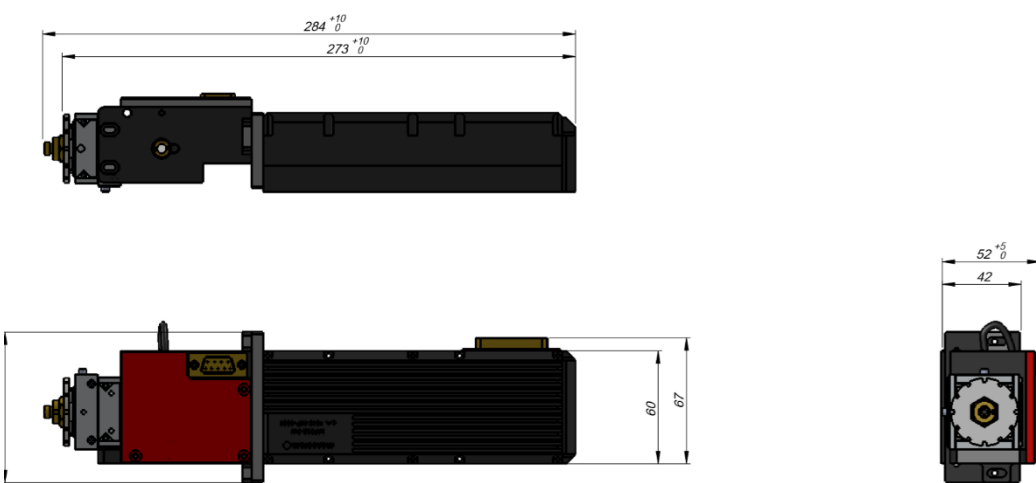


Product division	DPSSL Solid State Lasers
Part number	MP532-3W-50SMA
Description	Diode-pumped Solid State Green Laser 3W CW - 5W QCW
Main Features	<p>3W@532 nm at continuous wave (CW) and 5W quasi-continuous wave (QCW). Clamping technology mounted laser diode bar for pumping. Power on demand (switching On-Off). Multi-Path® technology. Low cooling requirements. High power stability. Monitor photodiode</p>
Applications	<p>Ophthalmology Dermatology Entertainment Industrial</p>
Picture	
Outline	

MP532-3W-50SMA | GENERAL SPECIFICATIONS

	Minimum	Operation	Max. Rating ⁽¹⁾	
LASER HEAD	Wavelength [nm]	531	532	533
	CW output peak power [W]	2,5	3	3,2
	Modulated output peak power [W]	4,5	5	5,3
	LD operating current ⁽²⁾ [A]	10	28	40
	LD operating voltage [V _{dc}]	1,6	1,7	1,9
	Monitor PD voltage (@3W, 10 kΩ) [V _{dc}]		1,5	2
	LD TEC current [A]			8
	LD TEC voltage [V _{dc}]			14
	NLC TEC current [A]			2
	NLC TEC voltage [V _{dc}]			4,8
	Laser pulse duration [ms]	10		CW
	Repetition rate [Hz]	1	25	CW
	Rise and fall time ⁽³⁾ [ms]	0,5	2	5
	Warm up time ⁽⁴⁾ [s]			30
	Power stability, short time (RMS) [%]			1
FIBER COUPLER	Aiming beam wavelength [nm]	637	639	640
	Aiming beam power [mW]	1	1,5	2
	Fiber core (μm)		50	52
	Fiber NA		0,22	
	Fiber length [m]	0,9	1,0	1,2
	Fiber connector		SMA-905	
	Coupling efficiency	80	84	87
	Shutter OFF voltage [V]		5	
	Shutter current [A]		0,5	
GENERAL	Operation temperature (housing) ⁽⁵⁾ [°C]	15	35	45
	Heat generated [W]		70	100
	Weight [g]		900	
	Lifetime [h]	5.000	10.000	
	Laser class (EN-60825)		4	

1. Not all maximum ratings are achievable at the same time
2. Current above the operation point can only be used for QCW mode
3. Rise time for QCW conditions, measured at 25Hz and 50%DC
4. Defined as the time required for laser stabilization (time to establish LD and NLC operation temperature and crystal thermal lens). In pulsed mode, the warm up time only affects the first pulses.
5. Within the temperature range, optical power could vary ±10%, to be compensated from the monitor photodiode signal through PID. For higher temperatures, laser head should be mounted on a cooled surface with a capacity to remove 60W waste heat at max. housing temp.