

# Diode-pumped solid-state laser

*Monocrom @MPSpider*

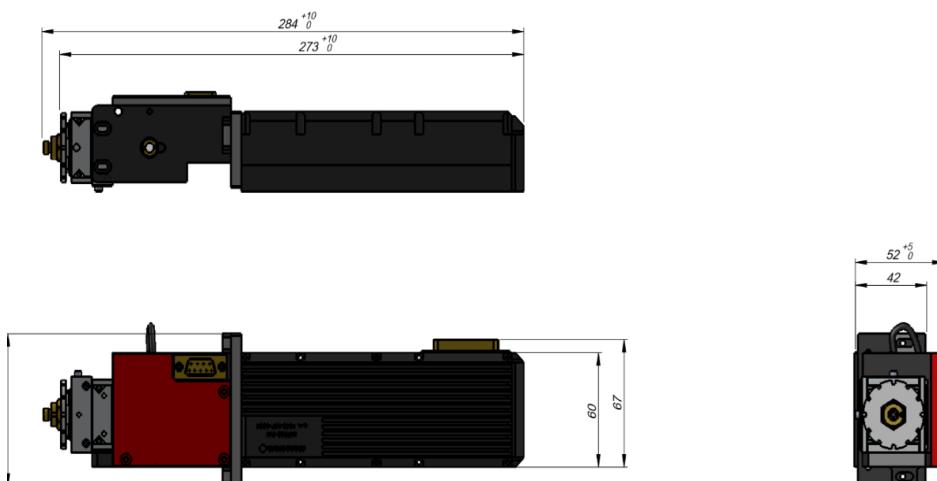
## Features:

- Peak power 8W at 532 nm (QCW)
- Power on demand (switching On-Off)
- Multi-Path® technology
- Low cooling requirements
- High power stability
- Monitor photodiode
- Non-soldered laser diode bars: Clamping Tech

## Suitable for:

- Ophthalmology
- Dermatology
- Entertainment
- Industrial

*Monocrom @MPSpider* | Outline



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Product specification are subject to change without notice.  
For complete details, please contact your local MONOCROM sales representative.

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## Monocrom @MPSpider | TECH Specifications

<b>Laser</b>	
Wavelength [nm]	532
Modulated output peak power [W]	8
LD operating current <sup>(2)</sup> [A]	> 50
LD operating voltage [Vdc]	< 1.7
Monitor PD voltage (@3W, 10 kΩ) [Vdc]	1.5
LD TEC current [A]	8
LD TEC voltage [Vdc]	14
NLC TEC current [A]	2
NLC TEC voltage [Vdc]	4.8
Laser pulse duration [ms]	Up to 20
Repetition rate [Hz]	5
Rise and fall time <sup>(3)</sup> [ms]	2
Warm up time <sup>(4)</sup> [s]	< 30
Power stability, short time (RMS) [%]	1
<b>Fiber</b>	
Aiming beam wavelength [nm]	639
Aiming beam power [mW]	1.5
Fiber core (μm)	50
Fiber NA	0.22
Fiber length [m]	1.0
Fiber connector	SMA-905
Coupling efficiency	84
Shutter OFF voltage [V]	5
Shutter current [A]	0.5
<b>General</b>	
Operation temperature (housing) <sup>(5)</sup> [°C]	~ 30
Heat generated [W]	< 70
Weight [g]	900
Lifetime [h]	15.000

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. Optics and cooling adaptation are available.

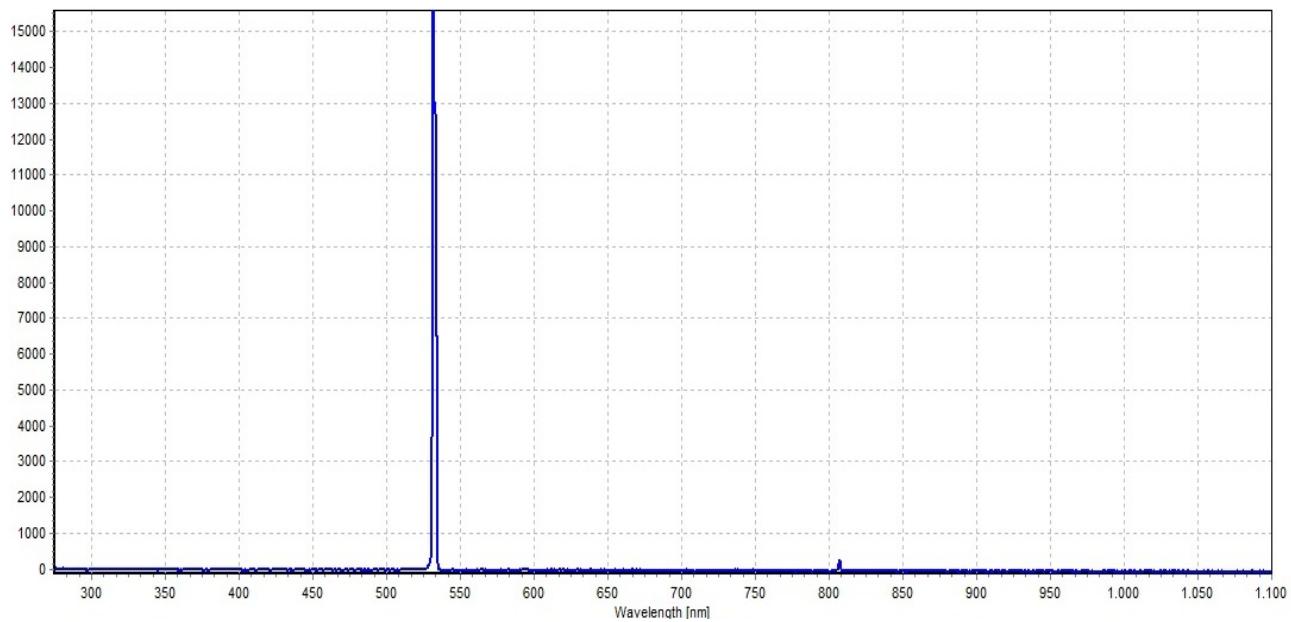
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## Monocrom @MPSpider I Spectrum



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UNE EN ISO 9001:2015

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