

# M<sup>2</sup> Beam

M<sup>2</sup> laser beam propagation analyzer



- Combines all ISO compliance accuracy
- Flexible, with different versions for pulsed and CW lasers
- Special version for high power measurements up to 4 kWatt
- Removable measuring head for regular laser beam profiling

## Specifications

### Input Beam

	M2Beam	M2Beam U3
<b>Technology</b>	Multi knife-edge scanning with silicone detector, InGaAs detector and enhanced InGaAs	USB 3 with CMOS 2.4 MP and built in filter wheel
<b>Spectral Range (nm)</b>	350 - 1100 for Si version 800 - 1800 for InGaAs version 190 - 1100 for UV-Enhanced version 800 - 2700 for InGaAs enhanced version	220 - 1350 with built in special CMOS technology
<b>Beam Power Range</b>	100 $\mu$ W - 1W (with supplied internal filters for the Si version) 100 $\mu$ W - 5 mW for InGaAs & UV versions Up to 4 kW for HP version	10 $\mu$ W - 100 mW with built in filter wheel Up to 4 kW for HP version
<b>Number of Knife-edges</b>	7	---
<b>Beam Size</b>	Up to 25mm diameter with lens (Si&UV versions)	
<b>Beam Waist to Lens Distance</b>	2.0 to 2.5 meters optimum 2.0 meters minimum	

### Scanning Assembly Attachment

<b>Construction</b>	Aluminium
<b>Lens Focal Length</b>	300 mm (at 632.6 nm)
<b>Lens Diameter</b>	25 mm
<b>Number of Scan Steps</b>	140
<b>Minimum Step Size</b>	100 $\mu$ m
<b>Scan Length</b>	280 mm

### Physical

<b>Weight</b>	2.5 Kg
<b>Dimensions</b>	100 x 173 x 415 mm
<b>Mounting</b>	M6 or 1/4" screws
<b>Mechanical Adjustment</b>	Horizontal angle: $\pm 1.5^\circ$ Vertical angle: $\pm 1.5^\circ$
<b>Cable Length</b>	2.5 m



M2Beam U3 Version

### Accuracy:

M<sup>2</sup> Values & General Parameters Accuracy:  $\pm 5\%$

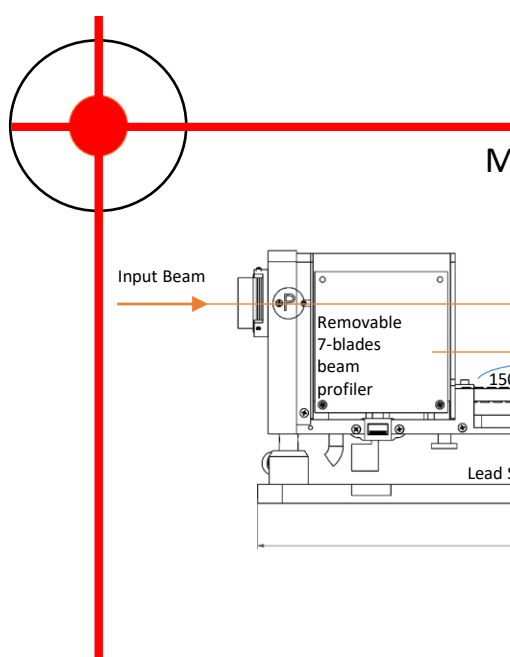
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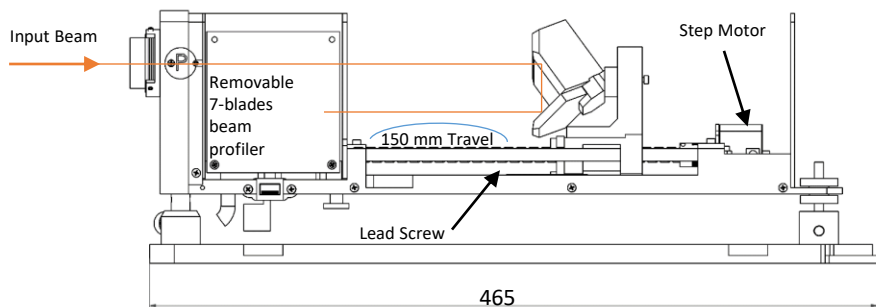
May 2022



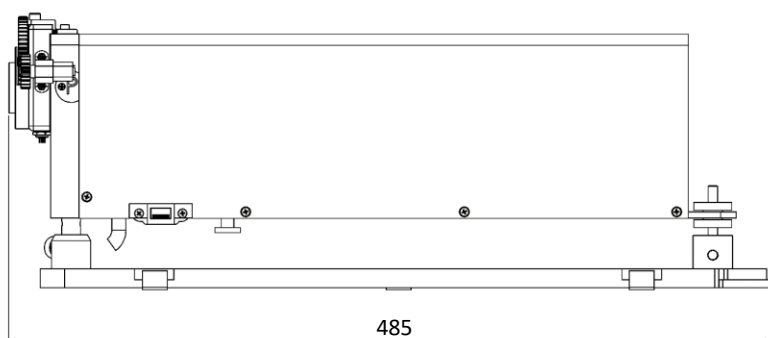
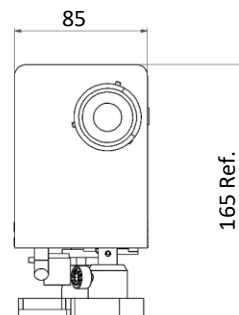


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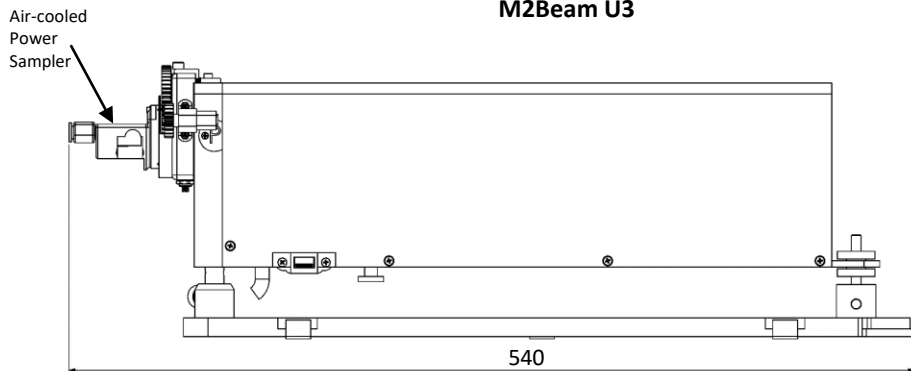
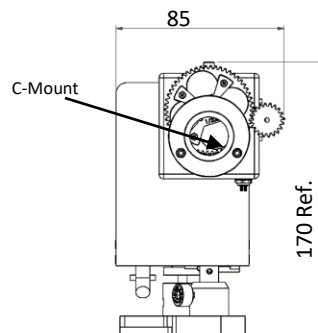
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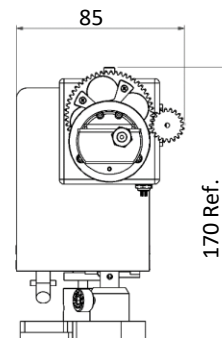
**M2Beam**



**M2Beam U3**



**M2Beam U3 High Power**



## Ordering Information

- M2Beam-Si** – measurement device for silicon range (350 – 1100nm)
- M2Beam-UV** – measurement device for silicon range (190 – 1100nm)
- M2Beam-IR** – InGaAs measurement device (800 – 1800nm)
- M2Beam-U3** – measurement device for 350-1550 nm CMOS based\*
- \*over 1350 nm – consult factory
- SAM3-HP-M** – beam sampler for high power beams

- Measurements:
- Beam Propagation (M<sup>2</sup>)
- Beam Waist Location
- Beam Waist Diameter
- Divergence
- Rayleigh Range
- Waist Asymmetry
- Astigmatism



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