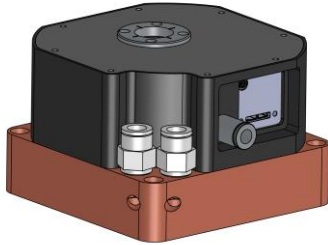


## CinCam Application Focus Beam Profiler - CinSpot FBP-50M-

The Focus-Beam-Profiler FBP-50M is a compact and fully automated tool to measure the focused laser beam from the UV to NIR range. The integrated CinCam beam profiler is moved precisely by the translation stage along the focus region. Its operational robustness and reliability ensures continuous use applications especially in industrial applications. A modular attenuation unit allows focus analysis up to 50W laser power. The whole measuring process is controlled by CINOGY's software RayCi.

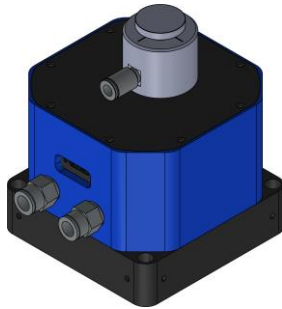
<b>SENSOR DATA</b>	
Spectral response:	340nm-1150nm
Pixel size:	5.3µm <sup>2</sup>
Number of pixel:	1.3MPixel
Technology:	CMOS (CCD)
Data output:	10Bit
Interface:	USB 2.0 / GigE
<b>FEATURES</b>	
Objective:	4x (NA 0.1) / 10x (NA 0.25) / 20x (NA 0.4)
Focus spot size:	>16µm@4x / >6µm@10x / >3µm@20x (accept focal lengths >80mm)
Stage length:	100mm (accuracy 10µm / speed 10mm/s)
Input power (without attenuator):	max 100mW
Input power (with attenuator):	max 50W (water cooling / 2l/min, 1bar, 20-25°C)
Replaceable ND filter:	Absorptive type: OD1.0 / OD2.0 / OD3.0 / OD4.0 / OD5.0 (400nm - 1150nm)
Replaceable ND filter:	Reflective type: OD1.0 / OD2.0 / OD3.0 (340nm - 1150nm)
Accuracy:	Waist position 50µm / Spot size 2-4% (measurement position is calibrated)
Software:	RayCi-Pro
<b>SPECIFICATIONS</b>	
Mechanical dimensions (W x H x L):	334mm x 220mm x 84mm <sup>3</sup> (without attenuator) / 370mm x 220mm x 84mm <sup>3</sup> (with attenuator)
Weight:	~6kg
Electrical requirements:	36V
Water-cooling:	Water-cooled absorber, Tap or DI-water; 2l/min, 1bar, 20-25°C, Ø 8mm hose
Storage temperature:	-10°C...+60°C
Operating temperature:	+0°C...+40°C
Regulations:	CE, RoHS



## CinCam Application Focus Beam Profiler - CinSpot FBP-1KF-

The Focus-Beam-Profiler FBP-1KF is a compact tool to measure the focused laser beam from the UV to NIR range for up to 400W laser input power. It works with a fixed measurement position and is characterized by very compact design. The operational robustness and reliability ensures continuous use applications especially in industrial applications. The whole measuring process is controlled by CINOGY's software RayCi.

SENSOR DATA		
Spectral response:	340nm-1150nm (1320nm)	340nm-950nm
Pixel size:	5.3 $\mu$ m <sup>2</sup>	3.45 $\mu$ m <sup>2</sup>
Number of pixel:	1.3MPixel	3.2MPixel
Technology:	CMOS	CMOS
Data output:	10Bit	12Bit
Interface:	USB 2.0 / USB 3.0	USB 2.0 / USB 3.0
FEATURES		
Collimated beam size:	0.5m-3mm	
Focus spot size:	$\geq 65\mu\text{m}$ @single mode / $\geq 300\mu\text{m}$ @multi mode	$\geq 42\mu\text{m}$ @single mode / $\geq 300\mu\text{m}$ @multi mode
Max NA / Divergence:	0.05 / 100mrad	
Input laser power:	max 400W@single mode / max 700W@multi mode	
	Measurement time with water-cooling @22°C: no limitation	
	Measurement time without water-cooling: 20s@400W	
Accuracy:	Waist position 50 $\mu$ m / Spot size 2-4% (measurement position is calibrated)	
Software:	RayCi-Pro	
SPECIFICATIONS		
Mechanical dimensions (W x H x L):	98mm x 98mm x 65mm	
Weight:	~2kg	
Electrical requirements:	Power supply via USB	
Water-cooling:	Water-cooled absorber, Tap or DI-water: 2l/min, 1bar, 20-25°C, Ø 8mm hose	
Dust protection:	Flushing with clean air to avoid contamination of the optics (cleaned, oil-free, dry, particles <10 nm)	
Storage temperature:	-10°C...+60°C	
Operating temperature:	+0°C...+40°C	
Regulations:	CE, RoHS	



**CinCam Application  
Focus Beam Profiler  
HP-FBP-2KF  
- Preliminary -**

The Focus-Beam-Profiler HP-FBP is a compact tool to measure the focused laser beam. Its operational robustness and reliability ensures continuous use applications especially in industrial applications. The whole measuring process is controlled by CINOGY's software RayCi.

<b>SENSOR DATA</b>		HP-FBP-2KF
Spectral response:	350nm-1150nm (other on request)	
Pixel size:	5.3µm <sup>2</sup>	
Number of pixel:	1.3MPixel	
Technology:	CMOS	
Data output:	10Bit	
Interface:	USB 2.0 / USB 3.0 (other on request)	
<b>FEATURES</b>		
Collimated beam size:	0.5m-4mm	
Minimum spot size:	≥64µm@single mode / ≥300µm@multi mode (accept focal lengths >120mm)	
Input laser power:	max 1000W@ mono mode / max 1200W@multi mode	
	Measurement time with water-cooling @22°C: no limitation	
	Measurement time without water-cooling: 20s@500W	
Accuracy:	Waist position 30µm / Spot size 2-4% (measurement position is calibrated)	
Software:	RayCi-Pro	
<b>SPECIFICATIONS</b>		
Mechanical dimensions (W x H x L):	98mm x 98mm x 111mm	
Weight:	~2,8kg	
Electrical requirements:	Power supply via USB	
Water-cooling:	Water-cooled absorber, Tap or DI-water; 4l/min, 2bar, 20-25°C, Ø 10mm hose	
Dust protection:	Flushing with clean air, Ø 6mm hose (cleaned, oil-free, dry, particles <10 nm)	
Storage temperature*:	-10°C...+60°C	
Operating temperature*:	+0°C...+40°C	
Regulations:	CE, RoHS	

\* Without condensation