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 CINOY’s software RayCi.

**SENSOR DATA**
- Spectral response: 340nm-1150nm
- Pixel size: 5.3µm²
- Number of pixel: 1.3MPixel
- Technology: CMOS (CCD)
- Data output: 10Bit
- Interface: USB 2.0 / GigE

**FEATURES**
- 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

**SPECIFICATIONS**
- Mechanical dimensions (W x H x L): 334mm x 220mm x 84mm³ (without attenuator) / 370mm x 220mm x 84mm³ (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
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 CINOYG’s software RayCi.

**SENSOR DATA**
- **Spectral response:**
  - 340nm-1150nm
  - 340nm-950nm
- **Pixel size:**
  - 5.3µm²
  - 3.45µm²
- **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:**
  - ≥65µm@single mode / ≥300µm@multi mode
  - ≥42µm@single mode / ≥300µm@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 50µm / 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
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.

<table>
<thead>
<tr>
<th>SENSOR DATA</th>
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<tbody>
<tr>
<td>Spectral response:</td>
<td>350nm-1150nm (other on request)</td>
</tr>
<tr>
<td>Pixel size:</td>
<td>5.3µm²</td>
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<tr>
<td>Number of pixel:</td>
<td>1.3MPixel</td>
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<tr>
<td>Technology:</td>
<td>CMOS</td>
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<tr>
<td>Data output:</td>
<td>10Bit</td>
</tr>
<tr>
<td>Interface:</td>
<td>USB 2.0 / USB 3.0 (other on request)</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Collimated beam size:</td>
<td>0.5m-4mm</td>
</tr>
<tr>
<td>Minimum spot size:</td>
<td>≥64µm@single mode / ≥300µm@multi mode (accept focal lengths &gt;120mm)</td>
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<tr>
<td>Input laser power:</td>
<td>max 1000W@ mono mode / max 1200W@multi mode</td>
</tr>
<tr>
<td>Measurement time with water-cooling @22°C:</td>
<td>no limitation</td>
</tr>
<tr>
<td>Measurement time without water-cooling:</td>
<td>20s@500W</td>
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<tr>
<td>Accuracy:</td>
<td>Waist position 30µm / Spot size 2-4% (measurement position is calibrated)</td>
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<tr>
<td>Software:</td>
<td>RayCi-Pro</td>
</tr>
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<tbody>
<tr>
<td>Mechanical dimensions (W x H x L):</td>
<td>98mm x 98mm x 100.5mm (~129.3mm with aperture)</td>
</tr>
<tr>
<td>Weight:</td>
<td>~2.6kg</td>
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<td>Electrical requirements:</td>
<td>Power supply via USB</td>
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<td>Water-cooling:</td>
<td>Water-cooled absorber, Tap or DI-water; 4l/min, 2bar, 20-22°C, Ø 10mm hose</td>
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<td>Flushing with clean air, Ø 6mm hose (cleaned, oil-free, dry, particles &lt;10 nm)</td>
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