

BeamWave[®] 10

All-In-One Laser Beam Profiler



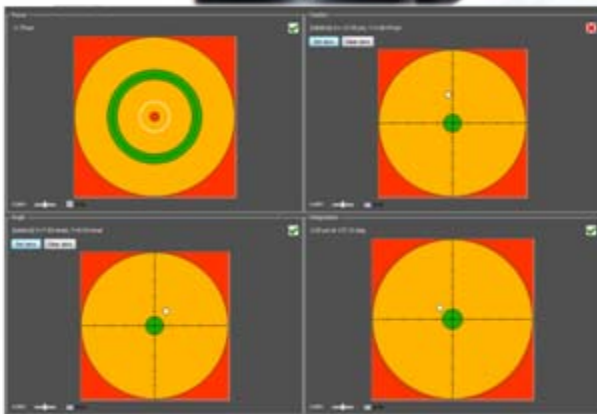
Real Time Beam Monitoring

Position • Size • Power • Ellipticity

Tilt • Defocus • Astigmatism

Applications

- Optics Alignment
- Laser Line Adjustment
- Focus & Collimation Adjustments
- Beam Quality Diagnostics
- Laser Performance Adjustments
- Elliptic Beam Orientation
- Optical Beam Alignment
- Linear Displacement Measurement
- Vibrations, Rotation Analysis
- Monitoring Laser Power & Centering
- Laser Process Monitoring



✓ *Real Time XYZ θ Parameters*

✓ *Sub Micron Precision*

✓ *Single sensor, No Moving Parts*

✓ *For Coherent & Non Coherent Beams*

Smart and Affordable Beam Monitoring & Alignment Solution

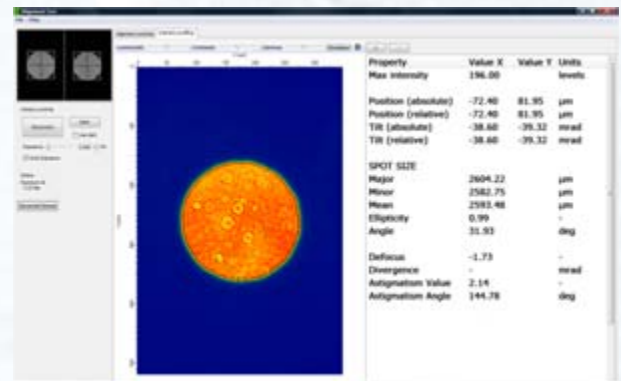
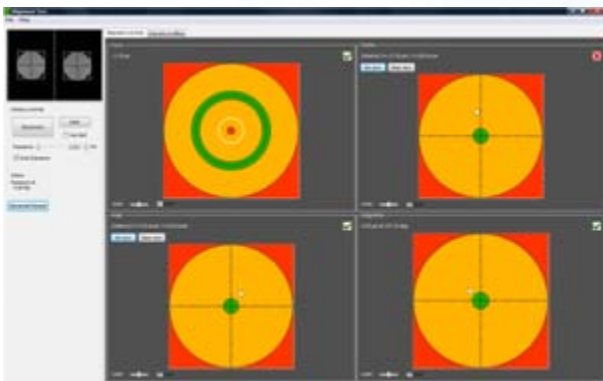
R&D Labs • Industrial & Medical Lasers • Optics Manufacturing

Machinery & Laser Process • Maintenance & Field Service

Real Time Beam Monitoring

BeamWave -10 sensor integrates the latest development of PhaseView's Digital Wavefront Technology, providing the ability to monitor light beams in both **transverse plane (XY)** and **longitudinal direction (Z)**, in one single device without moving components.

- 4 quadrants for quick & fine adjustments of:
 - XY Position
 - Tilt
 - Focus
 - Astigmatism
- Absolute or relative mode
- User-defined adjustments & tolerances
- Size & Centroid
- Power
- Ellipticity & Orientation
- Beam display



Specifications

BeamWave -10

Detector Type, Resolution, Pixel Size	CMOS, 1280 x 1024, 5.20 μm
Frame Rate (Max)	15 Hz
Exposure Range	40 μs – 70 ms
Wavelength Range	400 – 900 nm
Free Aperture Diameter	2 mm
Measured Parameters	Position, Size, Power, Ellipticity
XY Position Accuracy	< 1 μm
Saturation Intensity, Lowest Measurable Signal	1.70 $\mu\text{W}/\text{cm}^2$, 0.9 nW/cm ² (CW @ 633 nm, w/o ND filters)
Measured Aberrations	Tilt, Defocus, Astigmatism
Tilt Dynamic Range	> 15°
Tilt Measurement Sensitivity	6 μrad
Focus Dynamic Range	1200 λ
Optical Interface Connector	C-mount
Physical Dimensions, Weight	H: 44.00 mm, W: 44.00 mm, L: 25.40 mm, 35 g
Interface	USB