BeamWave® FIR 2 - 16µm

All-In-One Laser Beam Profiling

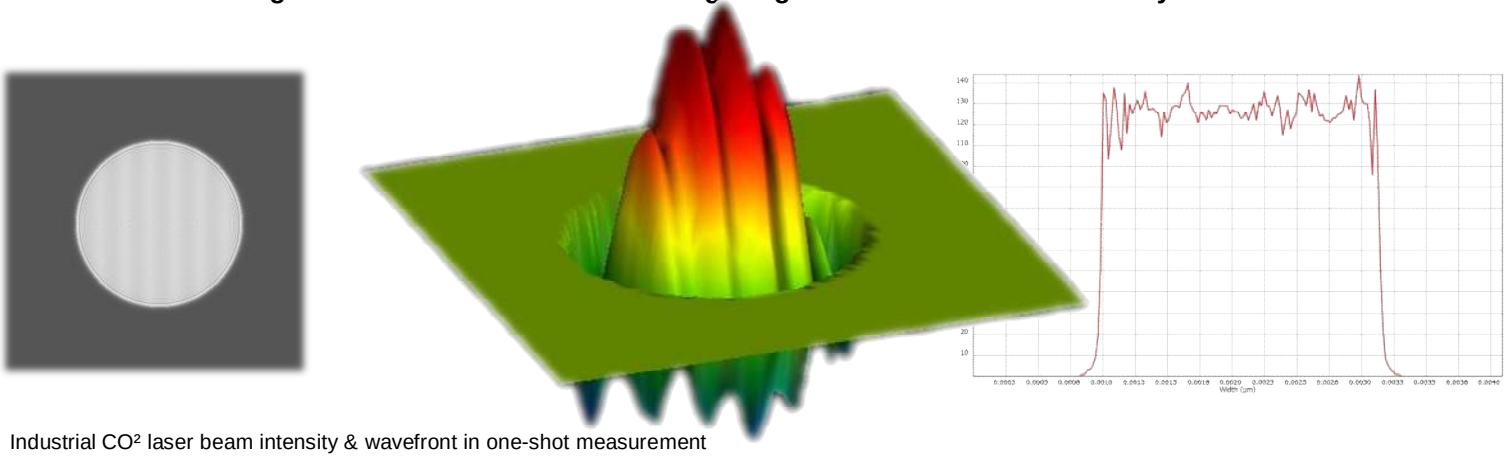
BeamWave® FIR is a smart instrument providing the highest resolution and dynamic range for wavefront analysis and beam characterization of FIR CW or pulsed sources and laser assemblies from 2 to 16µm.

BeamWave® FIR delivers simultaneously intensity and phase measurements with **unique benefits:**

- All-In-One device for wavefront & intensity measurements
- Complete laser beam characterization in one shot measurement
- Beam propagation analysis
- M^2, Zernike analysis, MTF, PSF measurements
- Cost effective, compact & light metrology instrument

BeamWave sensors provide high resolution beam & wavefront analysis

High Resolution Laser Beam Profiling • High-Resolution Wavefront Analysis



Industrial CO^2 laser beam intensity & wavefront in one-shot measurement

CO^2/FIR Laser Beam Profiling • Field Servicing of Laser Systems • Pass/Fail Analysis

Powered by

Based on the patented Digital Wavefront Technology, GetLase® performs in a remarkably fast and easy way, beam profiling analysis and high resolution wavefront measurements including M², Zernike, MTF and PSF. GetLase® provides comprehensive tools from automatic acquisition to wavefront display, analysis and reports.

- **Acquisition & Display**

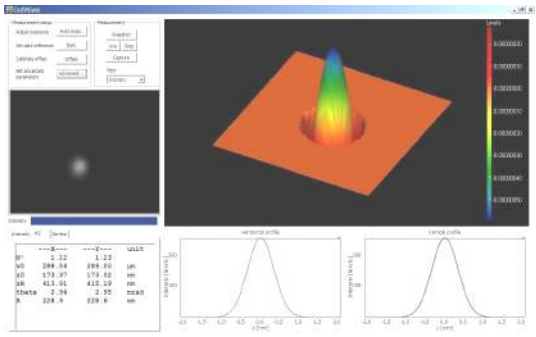
- Automatic Calibration
- Automatic Acquisition
- Exposure time adjustment
- External Auto Trigger Sync
- Live display of 3D high-resolution wavefront
- Live display high-resolution intensity image

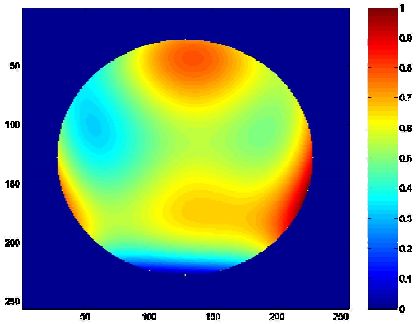
- **Analysis & Measurement**

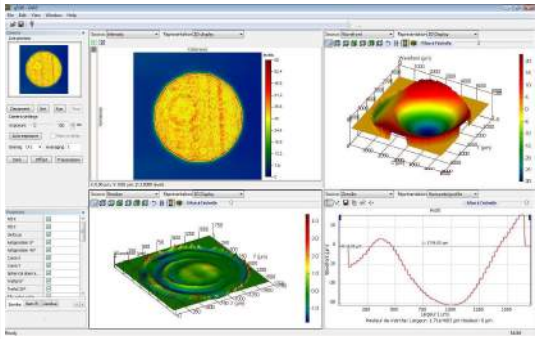
- 2D & 3D Wavefronts
- XY & 3D Beam Profiles
- Major, Minor & Mean Beam Diameters, Axis Auto-Orientation
- Intensity Weighted beam Centroid
- Beam Wander Display & Statistics

- **Data Export & Report**

- Image & Profile Averaging
- User-set rectangular or elliptic regions
- Wavefront data exporting: Matlab, Excel
- User-defined pass/fail criteria
- HTML Compatible Presentation
- Report Editor







Technical Specifications

Wavelength	2 - 16 µm
Pixels	640 x 480
Pixel Pitch	17 µm
Image Area	10.88 x 8.16 mm
Wavefront Measurement Points / lateral resolution	640x480 / 17µm
Sensitivity	0.01 λ
Dynamic Range	1 500 λ
Weight	272 g
Dimensions	61 x 67 x 66 mm
PC Interface	USB 2.0 Windows 7, XP, Vista

Applications

CO²/FIR Laser Beam Profiling

- Single shot complete laser beam characterization
- High-resolution wavefront analysis
- Simultaneous high-resolution phase & intensity
- High precision beam profiling

Field Servicing of Laser Systems

- Easy optics assembly alignment
- Small – size instrument
- Easy integration in any optical setup in confined spaces

Sintec Optronics Pte Ltd,
http://www.sintec.sg