

## High Resolution Wavefront Measurement

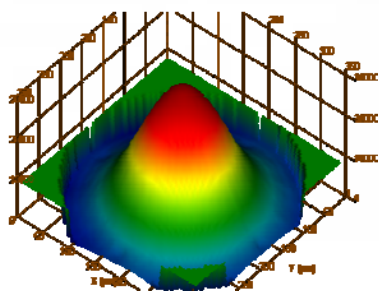
**Digital Wavefront Cameras**<sup>®</sup> provide the highest resolution and dynamic range available on the marketplace for wavefront analysis.

Digital Wavefront Cameras offer outstanding measurement capabilities for academic research labs and industries R&D with **unique benefits**:

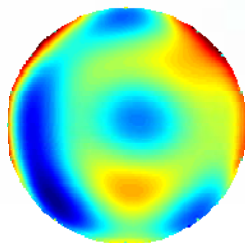
- Real time & simultaneous measurement of phase and intensity
- No trade-off between high spatial resolution & dynamic range
- Fine details native wavefront map for comprehensive Zernike analysis
- Accurate residual wavefront from reference or theoretical data
- Instant beam propagation analysis with no moving parts
- One shot beam profiling including beam waist diameter and position, Rayleigh range, divergence angle, asymmetry and astigmatism.



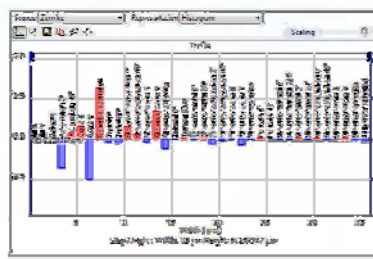
## High Resolution Wavefront Sensors for Beam Monitoring & Analysis



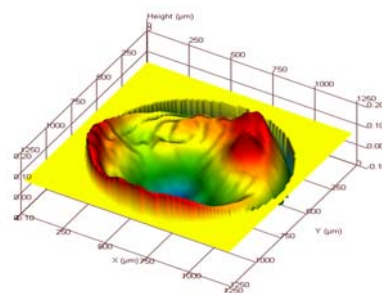
Beam Profiling



Aberration Map



Wavefront Analysis



Residual Wavefront from Reference

Wavefront Analysis • Beam Shaping & Monitoring • Adaptive Optics • Beam Profiling

**GetWave**<sup>®</sup> performs wavefront acquisition, measurement and analysis from any Digital Wavefront Cameras. GetWave<sup>®</sup> provides comprehensive tools from automatic acquisition to wavefront display, analysis and reports with multiple views including 2D and 3D display.

## • Acquisition

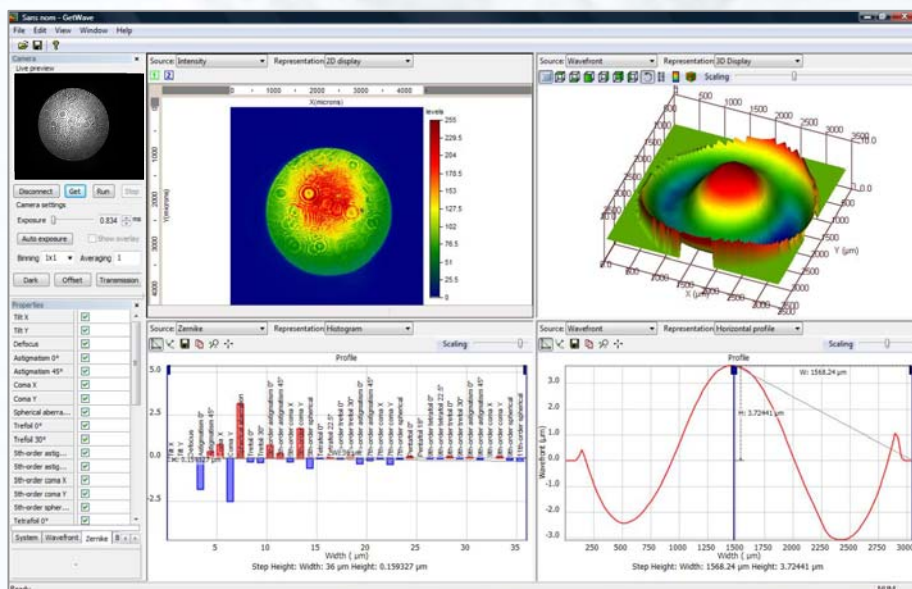
- Automatic calibration & acquisition
- Live display of camera image
- Live display of 2D and 3D intensity & wavefront

## • Analysis

- Real-time Zernike display and analysis
- Tilt, focus, astigmatism, coma, spherical, HOAs
- MTF & PSF, Strehl ratio
- Residual wavefront from reference or best fit
- Residual wavefront from theoretical data
- Profiles of wavefront and intensity

## • Export & Report

- Wavefront and Zernike data
- Report Editor, HTML Compatible Presentation



## Hardware Specifications & Performance

DWC Model	DWC 500	DWC 1000	DWC 1500
Measurement Points	500 x 500	1392 x 1040	1392 x 1040
Maximum Beam Dimensions	3.2 mm x 3.2 mm	6.4 mm x 4.8 mm	6.4 mm x 6.4 mm
Camera Resolution	1392 x 1024	1392 x 1040	1392 x 1040
Pixel Size	6.45 x 6.45 μm	4.65 x 4.65 μm	6.45 x 6.45 μm
Pixel Bit Depth	12	12	12
Wavelength	400 – 700 nm	400 – 700 nm	350 – 1100 nm
Wavefront Sensitivity	$\lambda/200$ rms (@ 633 nm)	$\lambda/200$ rms (@ 633 nm)	Flexible
Wavefront Accuracy	$\lambda/100$ rms (@ 633 nm)	$\lambda/100$ rms (@ 633 nm)	$\lambda/100$ rms (@ 633 nm)
Wavefront Dynamic	$>1500\lambda$ (@ 633 nm)	$>1500\lambda$ (@ 633 nm)	Flexible
Wavefront XY Resolution	6.45 μm	4.65 μm	6.45 μm
Power Supply	Via USB	Via 2 x USB	Via USB
Optical Input Connector	C-Mount	C-Mount	C-Mount
Weight & Size	350g - 55 x 41 x 80 mm	2.5kg - 87 x 161 x 84 mm	1.15kg - 114 x 72 x 171 mm