



Ripple Interferometry software offers a wide range of features and data analyses with a simple intuitive interface for easy operation. Interactive graphics display data in 2D, 3D, and profile cross-sections. There are full featured instrument control, data acquisition, and analysis tools for integrating with manufacturing processes, automation, and critical reporting. Using a simple workflow-based concept, users easily navigate the metrology experience from setup through analysis and reporting.

Acquisition & Analysis

- Phase-shifting and spatial carrier interferogram analysis
- Peak-to-valley (PV), RMS, ISO 10110-5
- Zernike, Seidel, XY polynomials
- Manual and automatic masking (apertures, obscurations)
- Slope Analysis
- Reference subtraction & gaussian, median, spike filters
- Quality control, averaging, and RMS repeatability test
- Plugins: ROC, Angle Measurements, MTF/PSF/PSD

Features

- Compatible with virtually any interferometer
- *Near Real-time abilities and graphics*
- *Simple yet powerful Ribbon Interface*
- *Multiple file formats (import, export)*
- C-Style scripting for automation
- ***Available as a full application or a programmers' library.***
- ***More features on back***

RIPPLE FEATURES

Acquisition

- Phase-shifting (3-12 interferograms)
- Spatial carrier interferogram analysis
- Masking: apertures, obscurations; manual and automatic. Circle, ellipse, square, rectangle, polygon.

Analysis

- Peak-to-valley (PV, PVr), RMS
- ISO 10110-5
- Zernikes (Fringe, ISO, Perkin Elmer)
- Seidels, XY polynomials
- Reference subtraction
- Filters: gaussian, median, spike
- Quality control, averaging, and RMS repeatability test

Advanced

- Slope Analysis
- Power Spectral Density (PSD)
- Point Spread Function (PSF)
- Modulation Transfer Function (MTF)

File I/O

- All interferograms, surface data, masks stored in the same file.
- Import: IntelliWave, Zygo
- Export: Zygo, CODE V, ZEMAX, Ascii

Reporting

- Display and print in 2D/3D. Any parameter can be selected for display and printing.
- Selectable units

Plugins

- See Plugins section for more features

New Features can be added at customer request.

Features

- Compatible with virtually any interferometer
- Available as a full application or a programmers' library.
- Simple powerful Ribbon Interface

Plugin Modules

- **Angle Measurements:** Wedge, Prism, Corner cube.
- **Optical:** Absolute Sphere, Three flat test, Homogeneity, Radius of Curvature
- **Diffraction:** PSD, MTF, PSF, Encircled energy,
- **Script Automation:** Powerful scripting for automation of complex tasks. Hundreds of functions.

Hardware Support

- Cameras
 - USB, GigE, Fire Wire
 - Composite Video (RS170, CCIR)
- Phase Shifters
 - Zygo, Wyko, ADE, ESDI
 - PI Polytec, Queens gate
- Frame grabbers
 - EPIX, Matrox
- Custom
 - Virtually any hardware can be supported using a customized device driver. Contact us.