

ContourGT-K 3D Optical Microscope

- Uncompromised Imaging and Metrology for Widest Range of Surfaces

The ContourGT-K 3D Optical Microscope sets a new industry standard in design and cost for surface metrology performance. With exceptional roughness and 2D/3D measurement capabilities, high-resolution imaging and the industry's most advanced user friendly interface, the system offers uncompromised metrology in a simplified package with a compact footprint. The gage-capable ContourGTK provides intuitive access to an extensive library of pre-programmed filters and analyses for LED, solar cell, thick films, semiconductor, ophthalmic, medical device, MEMS and tribology applications. Boasting unmatched Z-axis resolution and accuracy, the ContourGT-K provides all of the industry recognized advantages of Bruker's proprietary white light interferometry without the deficiencies of conventional confocal and standard digital microscopes.

Superior Imaging and Resolution

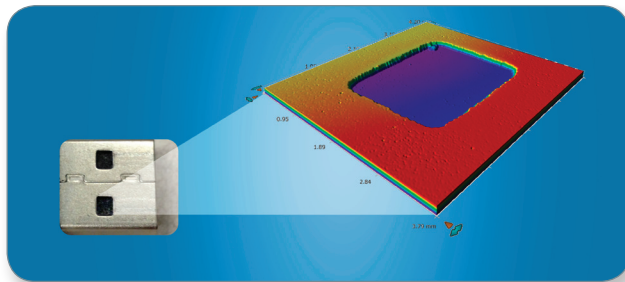
- Best Z resolution independent of magnification
- Largest field of view
- High-stability, vibration-tolerant design
- High-resolution and color camera options

Powerful Measurement and Analysis

- Streamlined interface and intuitive workflow
- Real-time automated measurement optimization
- Extensive library of filters and analysis options
- Customized analysis reporting

Unparalleled Metrology

The ContourGT-K is the culmination of over three decades of proprietary optical innovation and industry leadership in non-contact surface metrology, characterization and imaging. The ContourGT-K exhibits the low noise, high speed, accuracy, and precision results that quantitative metrology requires. With the use of multiple objectives and integrated feature recognition, features can be tracked over a variety of fields of view and at sub-nanometer vertical resolution, providing scale-independent results for quality control and process monitoring applications in very diverse industries.



Quantitative measurement of USB connector. ContourGT-K can image a large scan area over a variable reflectance sample, providing the fastest time to data.

Unmatched Value and Scalable Options

With thousands of customized analyses and Bruker's simple, powerful Vision64™ user interface, the ContourGT-K is optimized for productivity in the lab and on the factory floor. The hardware and software combine to provide streamlined access to top optical performance at price points thousands of dollars lower than is possible for comparable metrology capability. In addition, the ContourGT-K can be significantly extended past the standard platform with field-upgradable add-ons and application-specific customization packages:

- Fully automated turret and programmable X, Y, Z movement
- NanoLens™ AFM module
- Application-specific productivity software

**ContourGT-K delivers
uncompromised metrology capability
and unprecedented value.**

● Bruker Nano Surfaces Division

Tucson, AZ • USA
Phone +1.520.741.1044/800.366.9956
productinfo@bruker-nano.com

www.bruker.com

Specifications

Max. Scan Range	Up to 10mm
Vertical Resolution	<0.01nm
RMS Repeatability (PSI)	0.01nm
Lateral Resolution	0.38µm min (Sparrow criterion); 0.13µm (with AcuityXR™) 0.01µm (with NanoLens)
Step Height Accuracy	<0.75%*
Step Height Repeatability	<0.1% 1 sigma repeatability
Max. Scan	47µm/sec (with standard camera)
Sample Reflectivity	0.05% - 100%
Max. Sample Slope	Up to 40° (shiny surfaces); Up to 87° (rough surfaces)
Sample Height	Up to 100mm (4in.)
XY Sample Stage	150mm (6in.) manual or optional motorized stage
Z Focusing	100mm (4in.) manual or motorized option
Tip/Tilt Function	±6° manual in stage
Optical Metrology Module	Patented dual-LED illumination; Single-objective adapter; Optional automated or manual turret; Optional manual or motorized discrete modules
Objectives	Parfocal: 2.5x, 5x, 10x, 20x, 50x, 115x LWD: 1x, 1.5x, 2x, 5x, 10x TTM: 2x, 5x, 10x, 20x Bright field: 2.5x, w5x, 10x, 50x
Available Zoom Lenses	0.55x, 0.75x, 1x, 1.5x, 2x
Camera	Standard monochrome: 640 x 480 High-resolution monochrome (option): 1280 x 960 Color (option): 640 x 480
Software System	Vision64 Analysis Software on Windows 7 64-bit OS
Software Packages	Production mode; AcuityXR; Annular Analysis; HD VSI; High Speed AF; Optical Analysis; Sure-Vision; Thick Film; MatLab; SDK
XY Automation	Manual stitching standard; Automated stitching, scatter and grid automation standard with motorized XY stage
Calibration	Via traceable step standards
System Footprint	492mm (W) x 534mm (D) x 754mm (H)
System Weight	60kg (133lbs)
Warranty	12 months

* Absolute accuracy for step heights 8µm and greater.

Cover images

Foreground: ContourGT-K 3D Optical Microscope.

Background: 3D image of butterfly wing.

Insets: PSS structure (top), detail of metal surface

measurement (middle), medical implant samples in front of 3D knee implant measurement (bottom).