

# Fusion

Large Field-of-View 3D Multisensor Systems

# Intelligent Image Processing

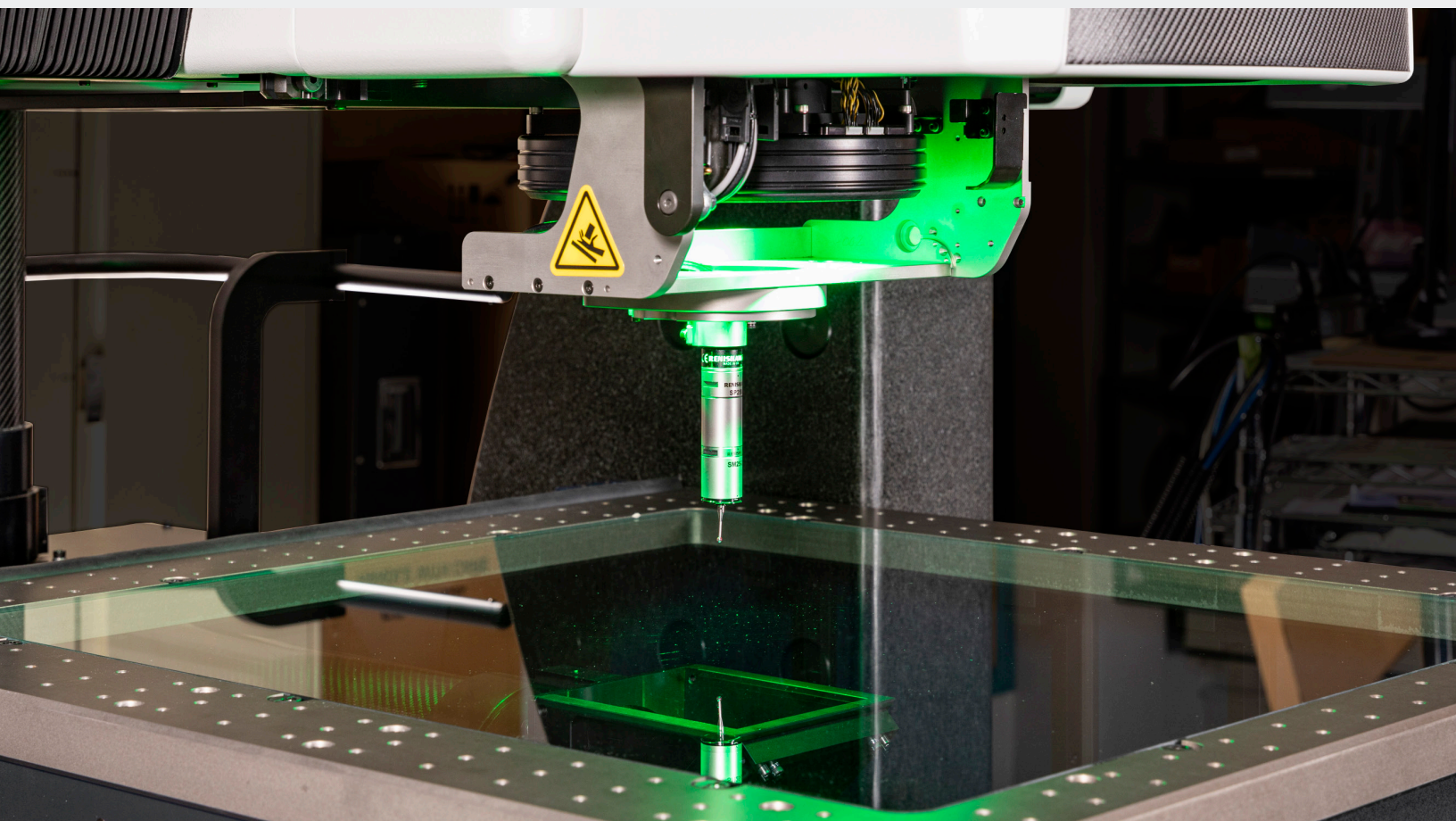
**Fusion™ is an innovative large field-of-view (LFOV) 3D multisensor measurement system that offers advanced large field image analysis capability.**

The heart of its capability lies in its fully telecentric LFOV optical system that is designed to provide power, speed, and versatility. A 75 mm depth of field and 100mm FOV combined with a high-speed transport delivers fast measurement throughput. Advanced design principles and FOV non-linear calibration allow Fusion to measure many features in a Large FOV with the same accuracy as a small FOV on a traditional video measurement system. For autofocus and small feature measurements, Fusion contains dual optical paths along the same optical centerline for instant switching between large field and high zoom imaging with the same working distance at the same stage location.

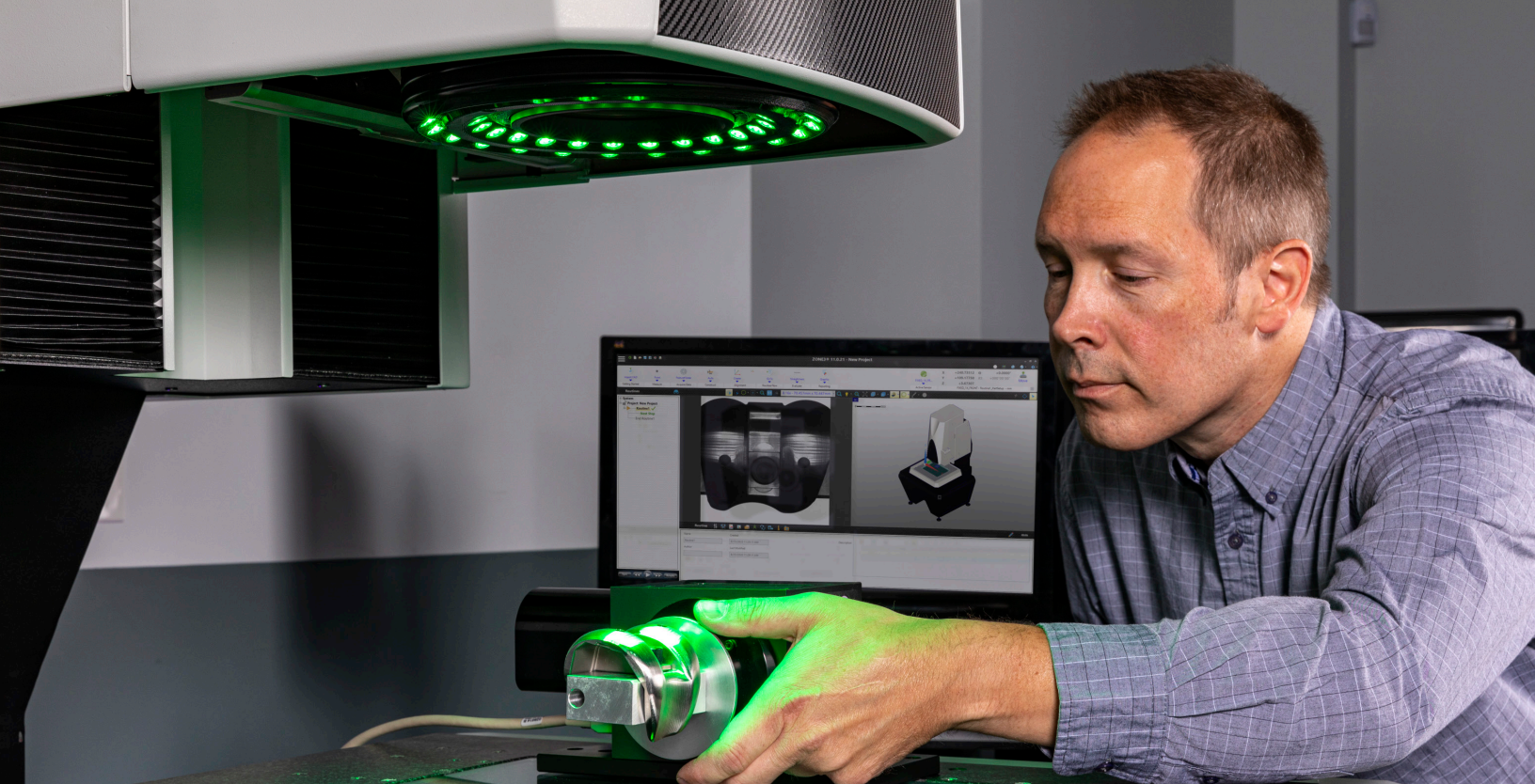
Fusion comes standard with multiple light sources to provide the ideal imaging for every application. Collimated LED profile illumination, square-on internal surface illumination, and a ring light with 8 programmable segments for oblique surface illumination provide numerous lighting options. The unique dual laser range finder system allows for optimal Z-focus positioning at low magnification.

Fusion is fully multisensor-capable to perform complex 3D measurements with the optional TeleStar® Plus Interferometric TTL (through-the-lens) Laser that is completely integrated within the optical system. Additionally, a touch trigger probe, continuous contact scanning probe, or Rainbow Probe™ white light sensor can be mounted on the patented rotational deployment mechanism. This places all sensors precisely on the optical centerline so that full stage travel is accessible for measurement with these sensors. Optional 4th and 5th axis rotary indexers provide high speed part indexing for complete measurement automation.

## Patented rotational deployment mechanism



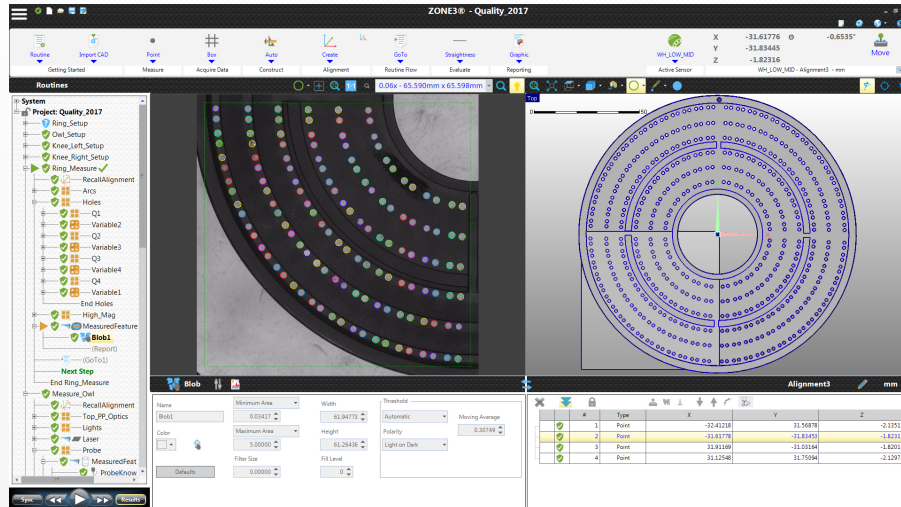




		Standard	Optional
XYZ Travel	Model		
	400	350 x 250 x 250 mm	
	600	540 x 500 x 300 mm	
XYZ Measuring Range (Max)	Model		
	400	420 x 320 x 250 mm	
	600	610 x 570 x 300 mm	
Field of View		Low Magnification: 70 x 70 mm High Magnification: 14 x 14 mm	
Optics		Telecentric, dual camera, dual optical magnification for instant magnification change	

# ZONE3 3D Multisensor Metrology Software

**ZONE3® Metrology software puts the power of OGP's multisensor experience into your measurement system for faster, easier, and more productive measurements than ever before.**



**Fast** – Full field image processing and high-speed cameras allow entire scenes to be measured instantly

**Capable** – Full multisensor capability, ASME Y14.5 and ISO 1101 compliant GD&T, graphical reporting, and custom scripting

**Easy** – Walk-up measurement tools, model-based graphics and video overlays regardless of which member of the ZONE3 family you use – Express, Prime, Pro, or Offline

ZONE3's automatic **Path Generation** uses nominals to automatically create an optimal path for each measurement with any sensor. Combined with intelligent routine **Optimization**, part programming and measurement run times are even further reduced by the software.

Advanced video tools like the patent pending **Reposition via Video** can be used to automatically align a part using a CAD model. **FeatureExtractor** automatically identifies and measures features visible within the FOV while **AutoID** can search and identify known parts to automatically run a previously created part program.

## Multisensor Options

Touch Probe



Scanning Probe



TeleStar TTL Laser



Rainbow Probe



Rotary Indexers



World Headquarters: Rochester, NY, USA • 585.544.0400 • [www.ogpnet.com](http://www.ogpnet.com)

OGP Shanghai Co, Ltd: Shanghai, China  
86.21.5045.8383/8989 • [www.smartscope.com.cn](http://www.smartscope.com.cn)

OGP Messtechnik GmbH: Hofheim-Wallau, Germany  
49.6122.9968.0 • [www.ogpmesstechnik.de](http://www.ogpmesstechnik.de)

Optical Gaging (S) Pte Ltd: Singapore • 65.6741.8880 • [www.smartscope.com.sg](http://www.smartscope.com.sg)