

QUALIFIRE LASER INTERFEROMETER

Introducing Qualifire™

A new generation of phase shifting interferometry



Imagine improving on the golden standard in industrial Fizeau laser interferometry. Zygo has accomplished this with our next generation laser interferometer—Qualifire™. Qualifire provides all the capabilities you've become accustomed to with the Verifire™ and takes the quality and reliability to the next level.

Innovative new technologies

Multiple new technologies make the Qualifire product line the most advanced phase shifting interferometer available. A novel, discrete zoom technology in the Qualifire 1.2k+ allows for system magnification with no moving optics! This allows for diffraction limited performance with an improved ITF (Instrument Transfer Function) and eliminates image shift between zooms. An optional dynamic illumination module enables versatile coherent artifact reduction methods for the cleanest system image available.

SMALLER | LIGHTER | MORE VERSATILE

zygo[™]
AMETEK

Thoughtful design for improved user experience

Qualifire features a smaller instrument footprint and reduced weight. The smaller mainframe measures less than 500 millimeters (20 inches) in length and weighs approximately 22 kilograms (50 pounds). Equipped with ergonomic lift handles and a protected, internal phase-measuring receptacle (PMR), the interferometer can be moved easily between measurement setups or brought to large test parts. The interferometer's optical train is sealed for ultimate imaging cleanliness and ease of service. Even the laser source can be swapped without exposing sensitive optics, ensuring peak performance with minimum down time. Move forward and backwards seamlessly as Qualifire is compatible with all existing transmission elements, receptacles, and mounts. The same optical centerline and aperture options are retained so all your existing configurations simply work.



New ergonomic design includes integrated handles on all sides, larger adjustment knobs for precision alignment and easier to access power button.

Smart accessories

To complement the improved system performance, Zygo has developed a new line of “smart” interferometer accessories that allow for superior metrology quality while reducing setup time. Install a smart transmission flat or sphere and Qualifire recognizes the optic and interfaces with Zygo's Mx™ software. With one click, Mx will perform lateral calibration and subtract the supplied calibrated system error file.

Leading metrology

Enabling precision metrology for our customers with smart accessories depends on the highest precision calibration. Our metrology processes are based on NIST-approved calibration techniques, traceable directly to the meter via the helium-neon (HeNe) laser line. Just like the previous generation interferometer, Qualifire is equipped with Zygo's propriety stabilized helium-neon laser source. Our lasers exceed the output power and lifetime rating of other commercially available lasers and are backed by a 3-year warranty, building on our legacy of quality!

Support you can trust

Allow Zygo to perform your ISO-compliant periodic instrument and accessory calibrations to ensure they continue to perform to the most exacting standards. Zygo has a direct global network that includes offices in the USA, Europe, and Asia. Our customer service is available when you need it, providing comprehensive support.



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