

# TYPICAL UPGRADE SPECIFICATION

## System Overview

<b>Measurement Capability</b>	Measures surface and transmitted wavefront
<b>Measurement Techniques</b>	Vibration Tolerant Phase Shifting interferometry
<b>Alignment System</b>	2-spot with reticle with 2° capture range
<b>Test Beam Diameter</b>	4 inch (102 mm)
<b>Optical Centerline</b>	4.25 in (108 mm)
<b>Laser Source</b>	Un-stabilized 633 nm HeNe, Class IIIa
<b>Camera Resolution</b>	1000 X 1000 pixels
<b>Shutter Speed – shortest</b>	20 $\mu$ s
<b>Digitization</b>	10 bits
<b>Image Resolution</b>	~400 $\mu$ m over entire FOV (Optically Limited)
<b>Image Distortion</b>	Up to 2% over entire focusing range
<b>Focus Range</b>	$\pm$ 2 meters
<b>Computer &amp; Software</b>	PC, any Windows® 64-bit OS, REVEAL software
<b>Mounting Configurations</b>	Horizontal or Vertical
<b>Accessories</b>	Accepts industry standard bayonet
<b>Physical (L x W x H)</b>	Varies
<b>Weight</b>	Varies



## Data Acquisition and Analysis Software

Instrument control for data acquisition, and robust algorithms to create reliable phase maps are the foundation of interferometers. And just like all Äpre Instruments interferometers, industry standard analysis and a unique built-in report writer convert data into information in seconds, to quickly improve and control your process.

The 64-bit architecture easily supports 4-Megapixel acquisition and its modular construction means robust, reliable performance. And running on any 64-bit Microsoft® OS it's on an operating system your IT department will endorse.

**REVEAL™**

## Performance

<b>RMS Repeatability</b>	<0.5 nm RMS 2 – with NO averaging
<b>RMS Wavefront Repeatability</b>	<0.4 nm RMS 2 – with NO averaging
<b>Maximum Fringe Resolution/ Slope</b>	> 1.5 Fringes/mm or > 150 fringes across the aperture
<b>Retrace Error @ Maximum Fringes</b>	~0.13 waves

## Operating Environment

<b>Temperature</b>	15 to 30C (59 to 86F)
<b><math>\Delta</math>T/<math>\Delta</math>t</b>	< 1.0 °C/15 min
<b>Humidity</b>	5 to 95% relative, non-condensing
<b>Vibration Isolation</b>	Isolation System recommended for PSI

Specifications subject to change without notice