The VIEW Benchmark 250 from QVI® delivers the high performance and reliability in a compact, benchtop package. Its advanced optics, illumination, available through-the-lens laser, and image processing capabilities make it a world-class metrology system.

The VIEW Benchmark 250 provides precision measurements in the Q/A laboratory or on the production floor.

- High-precision fixed lens optical system
- Advanced image processing for high speed, accuracy and precision
- Choice of powerful metrology software and data analysis tools

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<tr>
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<th>X</th>
<th>Y</th>
<th>Z</th>
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<tbody>
<tr>
<td>Travel (mm)</td>
<td>300</td>
<td>150</td>
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### Metrology Software:
- VIEW Metrology Software (VMS)
- Optional: Elements® metrology software
- Optional: Measure-X® metrology software

### Available Optional Software Modules:
- Area Multi-Focus
- Continuous Image Capture (CIC)
- Advanced image filtering, image stitching, custom UI
- MeasureFit® Plus
- SmartProfile® 3D GD&T evaluation software
- VMS Off-Line Workstation Software
- Digital IO

## Specifications

**X,Y,Z Travel (mm)**
- Standard: 300 x 150 x 150
- Optional: 250 x 125 x 125

**X,Y,Z Scale Resolution**
- Standard: 0.1 μm
- Optional: 0.05 μm (dual scales for X-axis)

**Stage Drive System**
- DC Servo Motor, X,Y,Z

**Max Velocity**
- X,Y: 150 mm/sec
- Z: 100 mm/sec

**Max Recommended Load**
- 25 kg

**Imaging Optics**
- Dual magnification, fixed lens optics with field interchangeable front lens options
- Single magnification, fixed lens optics with factory configurable back-tube and field interchangeable front lens options

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<tr>
<th>Lens</th>
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<tbody>
<tr>
<td>VIEW 2.5X microscope objective</td>
<td>2.78 x 2.07*&lt;br&gt;0.64 x 0.48**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
<td>VIEW 0.8 X</td>
<td>8.34 x 6.23*&lt;br&gt;6.46 x 4.82**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
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<tr>
<td>VIEW 1.0 X</td>
<td>1.35 x 1.01*&lt;br&gt;0.69 x 0.52**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
<td>VIEW 10.0 X</td>
<td>0.28 x 0.21*&lt;br&gt;0.16 x 0.12**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
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<tr>
<td>VIEW 5.0 X (TTL Laser)</td>
<td>1.91 x 1.43*&lt;br&gt;1.59 x 1.19**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
<td>VIEW 25.0 X</td>
<td>0.06 x 0.05**&lt;br&gt;*single mag or low mag&lt;br&gt;**high mag on dual mag</td>
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**Back Tube (Single Mag Only)**
- 200 mm (2X) backtube
- 100 mm (1X) back tube (single mag optics only)

**Metrology Camera**
- 1.4 megapixel (1392 x 1040), 1/2-inch, digital, monochrome
- 1.4 megapixel (1392 x 1040), 2/3-inch, digital, monochrome
- 2.0 megapixel (1628 x 1236), digital, monochrome

**Illumination**
- Green LED profile light and white LED coaxial surface light
- Multi-color programmable ring light with motorized incidence angle control, grid autofocus system

**Sensor Options**
- Through-the-lens (TTL) laser
- Spectra Probe white light range sensor
- Off-axis triangulation laser

**Measurement Modes**
- High Speed Move And Measure (MAM)
- Continuous Image Capture (CIC)

**System Controller**
- Quad core processor, Windows® 7 Operating System and on-board networking and communication ports

**Controller Accessory Package**
- 3-axis joystick for manual stage control, with E-stop and start buttons.
- Single LCD flat panel display, computer keyboard and mouse
- Dual LCD flat panel displays, computer keyboard and mouse

**Power Requirements**
- 115/230 VAC, 50/60 Hz, 1-Phase, 700W

**Rated Environment**
- Temperature: 18°-22° C.
- Relative Humidity: 30% - 80%
- Vibration below 15Hz: <0.0015g

**XY Area Accuracy**
1. Maximum rate of temperature change: 1° C/Hour |
2. Maximum vertical temperature gradient: 1° C/Meter
3. As measured velocity with evenly distributed load of 5KG

- (at 20°C)
- E₁: (1.8±6L/1000) μm
- E₂: (1.0±6L/1000) μm (requires high resolution scale option)

**Z Linear Accuracy**
- E₁: (2.0±5L/1000) μm
- E₂: (1.2±5L/1000) μm (with TTL laser and 5X lens)

### Notes:
- All specifications apply to a thermally stable machine and a certified artifact at 20°C
- Uncrated: 141 kg*
- Crated: 312 kg*
- *System weight (without computer)