

**QVI® SNAP™ 350**

## Large Area Digital Measuring Machine

**RAM**

SNAP measures complex parts instantly without programming. Simply place the part on the stage and click GO.

- Telecentric optics ensure accurate part measurements in shop conditions
- AutoID recognizes any known part in the field of view
- Automatically find and measure unknown parts in the measuring range
- Zoom Anywhere™ technology lets you zoom in to measure details anywhere in the viewing area
- Optional motorized 150 mm Z axis with video autofocus
- Optional touch probe and laser for high accuracy Z axis measurements



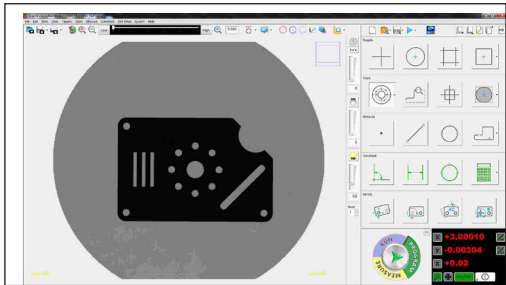
## Measurements Made Simple

SNAP provides a full range of feature measurements with an unlimited number of points - with or without a pre-programmed routine. AutoID and FeatureExtractor™ allow SNAP to accurately identify, orient and measure any part in its field of view.

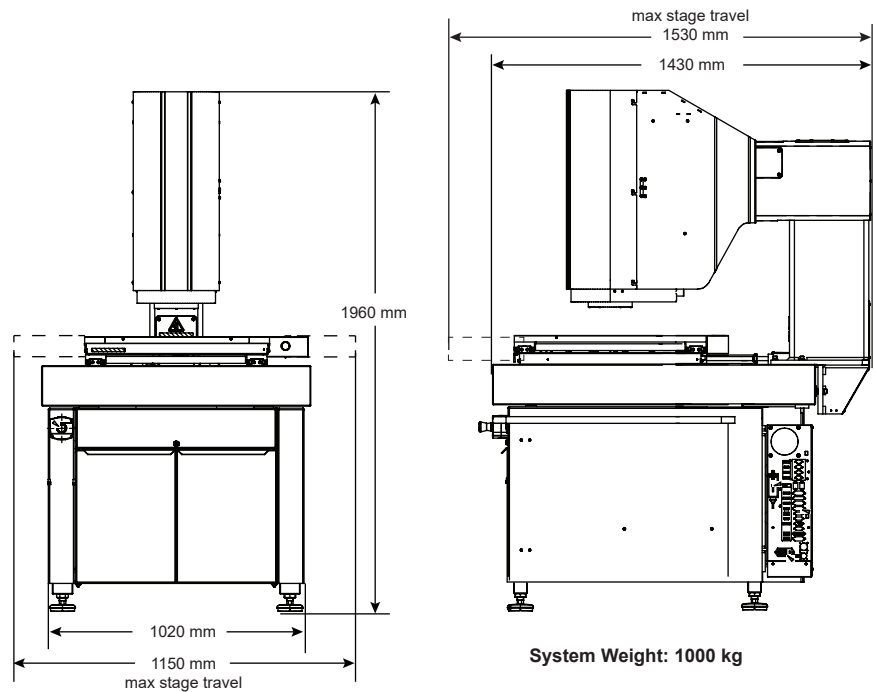
### Choose the mode for your task:

- Run - for pre-programmed routines
- Measure - to automatically measure any part
- Program - to set up a part routine

To measure, just place the part on the stage and click ▶



# QVI® SNAP™ 350



System Weight: 1000 kg

	Standard	Optional
<b>Measuring Unit</b>	Rugged steel frame and column with granite surface plate	
<b>Stage</b>	Precision motorized compound X,Y stage with DC servo drives	Precision motorized 150 mm Z axis with DC servo drive
<b>Stage Motion Range</b>	X,Y: 350 x 350 mm Z: 75 mm (manual preset)	X: 510 mm; Z: 150 mm w/automatic focus (with optional dual magnification optics)
<b>Maximum Measuring Range (X,Y)</b>	440 x 400 mm	480 x 460 mm (with optional Large Field Camera) 570 x 400 mm (with optional extended X axis travel) 610 x 460 mm (with optional Large Field Camera and extended X axis travel)
<b>Maximum Recommended Stage Load</b>	30 kg	
<b>Optics</b>	Telecentric, single optical magnification	Telecentric, dual optical magnification with 4X optical high magnification 16X high magnification lens (dual magnification, large field camera systems only)
<b>Metrology Camera</b>	QVI High Density Megapixel Metrology Camera	QVI Large Field Megapixel Metrology Camera
<b>Maximum Field of View (diagonal)</b>	<i>Single Mag / High Density Camera:</i> 78 mm	<i>Single Mag / Large Field Camera:</i> Low Mag 100 mm <i>Dual Mag / High Density Camera:</i> Low Mag 78 mm, High Mag 19.5 mm <i>Dual Mag / Large Field Camera:</i> Low Mag 100 mm, 4X Mag 24.5 mm, 16X Mag 5mm
<b>Digital Zoom Range</b>	<i>Single Mag / High Density Camera:</i> 4:1 total zoom range	<i>Single Mag / Large Field Camera:</i> 3:1 total zoom range <i>Dual Mag / High Density Camera:</i> 16:1 total zoom range <i>Dual Mag / Large Field Camera:</i> 12:1 total zoom range (4X high mag); (60:1 with 16X)
<b>Depth of Field</b>	<i>Single Mag / High Density Camera:</i> 12 mm	<i>Single Mag / Large Field Camera:</i> 50 mm <i>Dual Mag / High Density Camera:</i> Low Mag 20 mm, High Mag 5 mm <i>Dual Mag / Large Field Camera:</i> Low Mag 50 mm, High Mag (4X) 10 mm; (16X) 2 mm
<b>Sensor Options</b>		Touch probe and change rack; DRS™ Laser (both require optional motorized Z axis)
<b>Illumination</b>	All LED, green substage profile light and programmable 8-sector green ring light	LED green coaxial surface light
<b>Image Processing</b>	SNAP advanced image analysis, 256 level grayscale, with 10:1 - 50:1 sub-pixel resolution	
<b>User Control Unit</b>	Multi-function hand controller with joystick and lighting controls	
<b>System Controller</b> <small>*Controller configuration subject to change without notice.</small>	QVI standard system controller with networking and communication ports*	Single flat panel LCD monitor, or dual flat panel LCD monitors; keyboard, mouse
<b>Miscellaneous Options</b>		Barcode reader, USB digital I/O, fixture kit, rotary indexer, calibration artifact
<b>Rated Environment</b>	Temperature 18-22° C, stable to ±1° C; 30-80% humidity; vibration <0.001g below 15 Hz	
<b>Power</b>	100-120 VAC or 200-240 VAC, 50/60 Hz, 1 phase, 400W	
<b>XY Area Accuracy (E<sub>2</sub>)</b> <sup>1,2,3,4,5</sup>	(5.0 + 8L/1000) μm	
<b>Z Accuracy (E<sub>1</sub>)</b> <sup>1,2,3,4,5</sup>		(25.0 + 6L/1000) μm (with optional dual magnification optics and motorized Z-axis) (5.0 + 6L/1000) μm (with optional touch probe or DRS laser)
<b>XY FOV Accuracy (E<sub>2</sub>)</b> <sup>1,3,4</sup>	<b>Single Magnification Optics</b>	<b>Dual Magnification Optics / Low Mag</b> <b>Dual Magnification Optics / High Mag</b>
	5 μm	10 μm      5 μm (4X) 1 μm (16X)

1. Where L = Measurement length in mm. All specifications apply to a thermally stable system operated in the rated environment. | 2. Applies to the highest digital zoom level at each optical magnification and full X-axis travel. | 3. With evenly distributed 2.5 kg load. | 4. QVI calibration artifact P/N 640133 or 640685 for high density camera; 640554 for large field camera. | 5. Calibration artifacts are described in QVI publication number 790762.



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