



Sprint A Large Transport Three-Axis Measurement System

Productivity on the Shop Floor

SprintMVP™ 400/600 is a large capacity, fully automatic, 3 axis dimensional measuring system. A choice of three measuring ranges is available to accommodate a wide range of parts and fixtures. SprintMVP features high precision stages and optics, and a high resolution digital color camera for crystal clear imaging.

Measurement Range (mm)

Models	X	Υ	Z
SprintMVP 400	450	450	150
SprintMVP 400 (With Extended Z-axis)	450	450	300
SprintMVP 600	610	450	150

Features

- Massive granite base for stability
- Precision compound XY stages
- 0.5 micron scales on XY & Z standard
- Fully automatic 3 axis joystick control
- Versatile Measure-X[®] software



SprintMVP 400 System

Optics

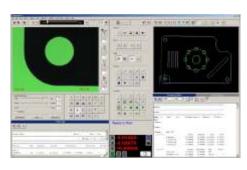
- High resolution color digital megapixel camera
- Motorized zoom lens system, 24X to 370X on-screen digital/optical magnification standard with full feature Measure-X layout
- 12X to 1470X on-screen digital/optical magnification with optional add-on lenses and dual monitor user interface
- LED backlight, top light and high intensity ring light standard

Options

- Renishaw touch probe & change rack
- QVI® DRS™ laser
- Rotary indexer
- Digital I/O capability

Software That Makes Measurements Simpler

QVI Measure-X software makes it easy to measure parts or create automatic measurement routines. FeatureFinder® makes it easy to measure any feature in the video window instantly. If CAD files are available, just download the DXF and let Measure-X create the program for you. AutoCorrelate[™] lets you stage and measure parts without fixturing.



Powerful Measure-X Metrology Software



Measuring Unit	400	600
XYZ Travel, mm	450 x 450 x 150 (Optional Extended Z- 300mm)	610 x 450 x 150
XYZ Travel, in	18 x 18 x 6 (Optional Extended Z- 12in)	24 x 18 x 6
System Dimensions, mm (XYZ)	1160 x 1650 x 1632 (Optional Extended Z- 2100mm)	1310 x 1650 x 1632
System Dimensions, in (XYZ)	46 x 65 x 64 (Optional Extended Z- 83in)	51.5 x 65 x 64
System Weight, kg/lbs	980 / 2160	980 / 2160
Shipping Weight, kg/lbs	1120 / 2465	1120 / 2465

X-Y Stage Precision, motorized compound X-Y stage with 3-axis joystick control.

Digital camera coupled to a motorized zoom lens, standard

30 kg max recommended load

Scale Resolution

(XYZ)
Optics

0.5µm (0.00002")

VectorLight™

Camera Megapixel Digital Color Camera

Field of View 9.1mm low mag. to 0.6mm high mag. (diagonal)

Magnification on 24X to 370X on-screen digital/optical magnification standard with full

24" LCD Monitor feature MX layout

12X to 1470X on-screen digital/optical magnification with optional add-on

lenses and dual monitor user interface

Optional Auxiliary

Lens

0.5x, 0.75x, 1.5x, 2.0x

Illumination LED VectorLight (six rings, seven sectors), LED backlight, LED surface

(square-on), optional full LED VectorLight (six rings, eight sectors)

Controller Windows® PC

Software Measure-X® Metrology Software by QVI®.

Optional MeasureFit[®] Plus, SmartReport[®] powered by QC Calc[™], CAD interface, and SmartFeature[®] software for FDA compliant

environments

Temperature 20° ± 1° C (Rated), 15° - 30° C (Safe Operating)

Power 100-240 VAC, 50/60 Hz, 1Ø, 1000 W

Misc. Options Motorized rotary indexer, footswitch, calibration grid

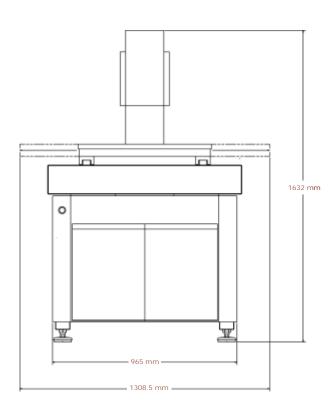
Sensor Options TP20 touch probe, touch probe change rack, and QVI DRS™ laser

Measuring XY* $E_2 = (3.0 + 8L/1000) \mu m (SprintMVP 400)$ Accuracy $E_2 = (3.5 + 8L/1000) \mu m (SprintMVP 600)$

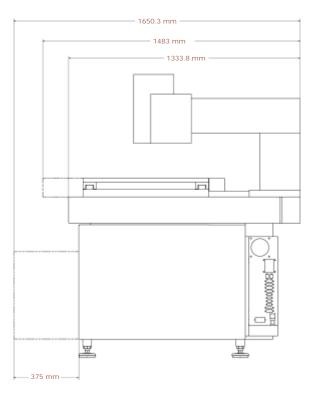
 Z^{**} E₁ = (4.0 + 8L/1000) µm (All Models)

^{**}Z axis artifact: QVI step gage or master gage blocks.





600 Model Shown



Manufactured by:



Rochester, New York, USA

^{*}Where L = Length in mm, with evenly distributed 5 kg load in the standard measuring plane. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy. XY axis artifact: 25 intersection grid reticle in the standard measuring plane. The standard measuring plane is defined as a plane that is 25 mm above the worktable. All optical accuracy specifications at maximum zoom lens setting