



# Sprint MVP

## A Large Transport Three-Axis Measurement System

### Productivity on the Shop Floor

SprintMVP™ 624 is a large capacity, fully automatic, 3 axis dimensional measuring system. It features a high precision moving bridge and optics, for measurement of larger, heavier parts.



SprintMVP 624 System

### Measurement Range (mm)

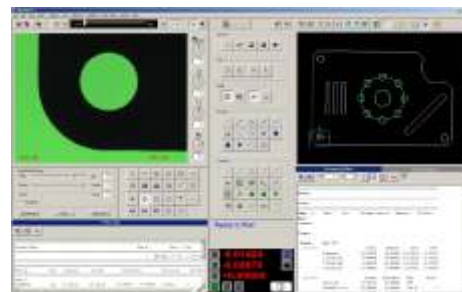
Model	X	Y	Z
SprintMVP 624	624	624	200

### Features

- Massive granite base for stability
- Moving bridge design with stationary part, ideal for large heavy parts
- 0.5 micron scales on XY&Z standard
- Fully automatic - 3 axis joystick control
- High resolution digital color 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

### 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

### Options

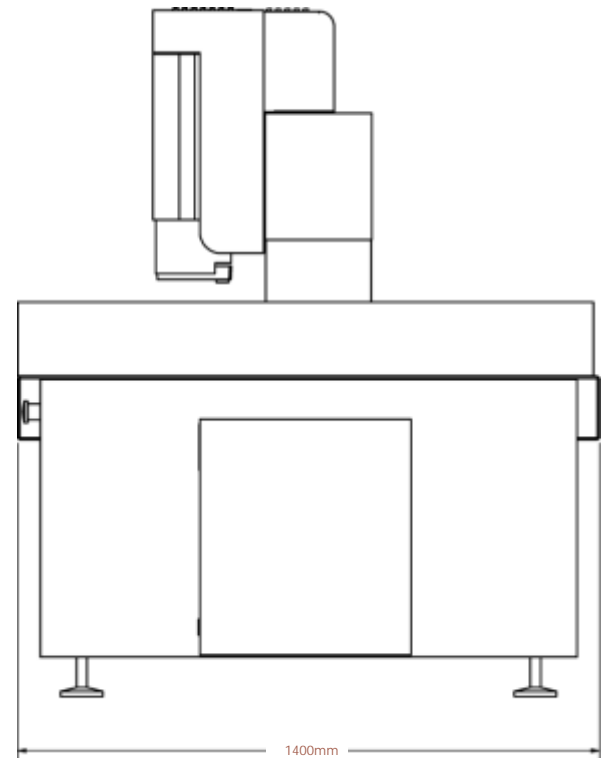
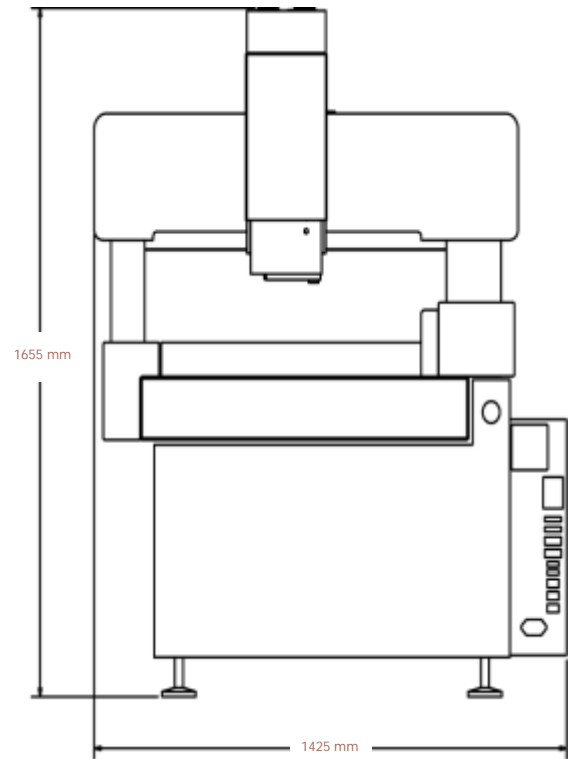
- Renishaw TP-20 touch probe and 2 or 4 position change rack
- QVI® DRS™ laser
- Rotary indexer
- Digital I/O capability

Measuring Unit	624
XYZ Travel, mm	624 x 624 x 200
XYZ Travel, in	24 x 24 x 8
System Dimensions, mm (XYZ)	1425 x 1400 x 1655
System Dimensions, in (XYZ)	56 x 55 x 65
System Weight, kg/lbs	930 / 2040

<b>Stage</b>	Moving bridge style XYZ transport Optional dual Y-axis scale and drive mechanism for improved accuracy
<b>Recommended Max Load</b>	Max: 50 kg load evenly distributed on glass Max: 100 kg load evenly distributed on stage
<b>Scale Resolution (XYZ)</b>	0.5µm (0.00002") (XYZ) Optional scale resolution (XYZ) 0.1 µm (0.000004")
<b>Optics</b>	Digital camera coupled to a motorized zoom lens, standard VectorLight™
<b>Camera</b>	Megapixel Digital Color Camera
<b>Field Of View</b>	9.1mm low mag to 0.6mm high mag (diagonal)
<b>Magnification on 24" LCD Monitor</b>	24X to 370X on-screen digital/optical magnification standard with full feature MX layout 12X to 1470X on-screen digital/optical magnification with optional add-on lenses and dual monitor user interface
<b>Optional Auxiliary Lens</b>	0.5X, 0.75X, 1.5X, 2.0X
<b>Illumination</b>	LED VectorLight (six rings, seven sectors), LED backlight, LED surface (square-on), optional full LED VectorLight (six rings, eight sectors)
<b>Controller</b>	Windows® PC
<b>Software</b>	Measure-X® Metrology Software by QVI®. Optional software MeasureFit® Plus, SmartReport® powered by QC Calc™, CAD interface, and SmartFeature® software for FDA compliant environments
<b>Temperature</b>	20° ± 1° C (Rated), 15° - 30° C (Safe Operating)
<b>Power</b>	100-240 VAC, 50/60Hz, 1Ø, 1000 W
<b>Misc. Options</b>	Motorized rotary indexer, footswitch, and calibration grid
<b>Sensor Options</b>	TP-20 touch probe, touch probe change rack, and QVI DRS™ laser
<b>Measuring Accuracy</b>	XY* $E_2 = (5.0 + 8L/1000)\mu\text{m}$ $E_2 = (3.0 + 5L/1000)\mu\text{m}$ With optional dual Y-axis scale & drive  Z** $E_1 = (4.0 + 8L/1000)\mu\text{m}$

\* 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 settling

\*\*Z axis artifact: QVI step gage or master gage blocks.



**RAM Optical Instrumentation**



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