



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)

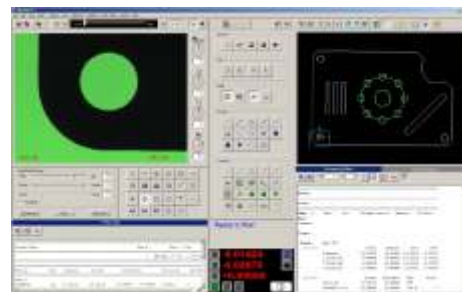
Model	X	Y	Z
SprintMVP 624	624	624	200

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

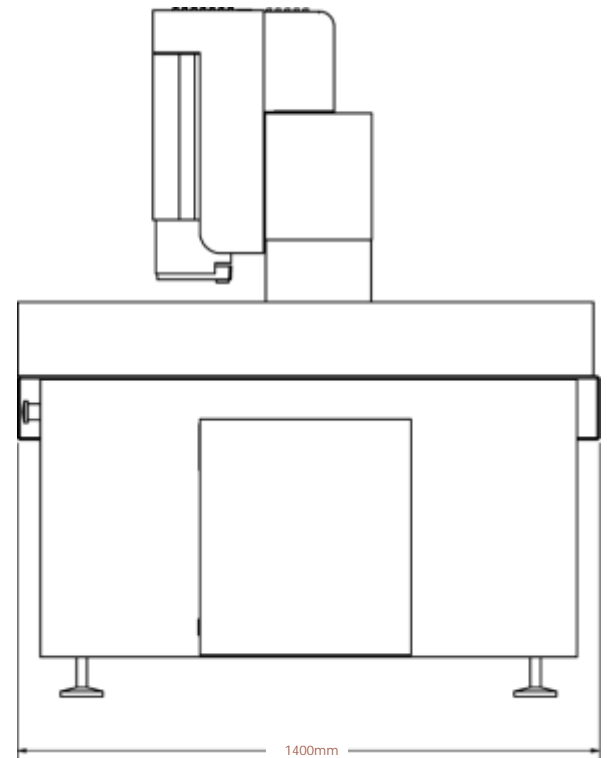
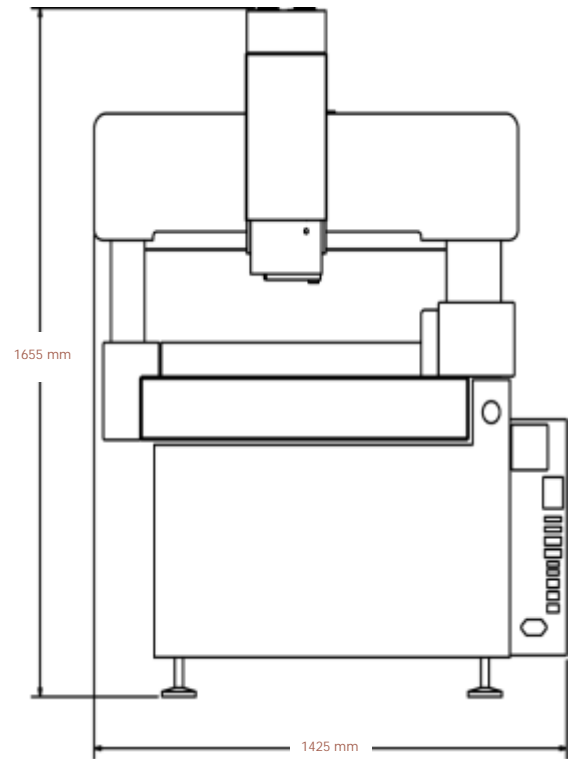
- Renishaw TP-20 touch probe and 2 or 4 position change rack
- QVI® DRS™ laser
- Rotary indexer
- Digital I/O capability

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

Stage	Moving bridge style XYZ transport Optional dual Y-axis scale and drive mechanism for improved accuracy
Recommended Max Load	Max: 50 kg load evenly distributed on glass Max: 100 kg load evenly distributed on stage
Scale Resolution (XYZ)	0.5µm (0.00002") (XYZ) Optional scale resolution (XYZ) 0.1 µm (0.000004")
Optics	Digital camera coupled to a motorized zoom lens, standard VectorLight™
Camera	Megapixel Digital Color Camera
Field Of View	9.1mm low mag to 0.6mm high mag (diagonal)
Magnification on 24" LCD Monitor	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
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 software 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, 50/60Hz, 1Ø, 1000 W
Misc. Options	Motorized rotary indexer, footswitch, and calibration grid
Sensor Options	TP-20 touch probe, touch probe change rack, and QVI DRS™ laser
Measuring Accuracy	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 setting

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



**RAM Optical
Instrumentation**



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