Sprint MVP

Automatic Benchtop Measurement System

Productivity on the Bench Top

SprintMVP™ is a high performance yet affordable dimensional measurement system. SprintMVP offers a choice of three models to suit your measurement needs.

SprintMVP systems are fully automatic with motorized precision XYZ stages, motorized zoom optics and high resolution digital color cameras. Measure-X® metrology software is equally suited to simple walk-up measurements or fully automated routines.

Measurement Range (mm)

| Models	X	Y	Z
SprintMVP 200	200	150	150
SprintMVP 250	300	150	150
SprintMVP 300	300	300	150

SprintMVP 200 System

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.

Features & Benefits

- Rugged granite base & column
- Precision XYZ stages
- 3-axis joystick motion control
- 0.5 micron scales on XY & Z
- Megapixel Digital Color Camera
- LED backlight and coaxial surface light
- High intensity LED ring light
- Advanced image processing
- Automatic 3-axis measurements
- Optional TP-20 touch probe
- Optional QVI DRS™ laser
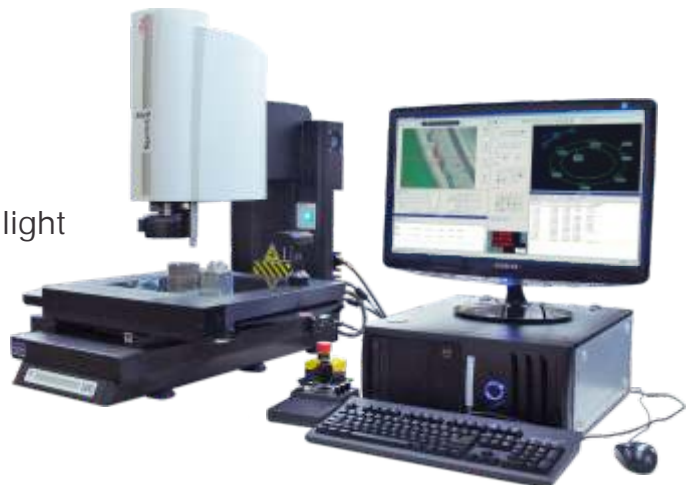
Sprint MVP
Features & Technical Specifications

Measuring Unit	200	250	300
XYZ Travel, mm	200 x 150 x 150	300 x 150 x 150	300 x 300 x 150
XYZ Travel, in	8 x 6 x 6	12 x 6 x 6	12 x 12 x 6
Weight Approximate, kg/lbs	110 / 243	113 / 250	136 / 300
System Dimensions, mm (XYZ)	625 x 665 x 870	850 x 665 x 870	850 x 960 x 870
System Dimensions, in (XYZ)	24.6 x 26 x 34	33.5 x 26 x 34	33.4 x 38 x 34

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

Recommended Max Load
20 kg load for the 200 and 250 models
25 kg load for the 300 model

Scale Resolution (XYZ)
0.5µm (0.00002")
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)

Optional Auxiliary Lenses
0.5x, 0.75x, 1.5x, 2.0x

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

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, 50/60Hz, 1Ø, 500 W

Misc. Options
Manual or motorized rotary indexer, footswitch, dust cover, stage calibration grid

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

Measuring Accuracy
$XY^* \quad E_2 = (2.5 + 4L/1000)$ µm (SprintMVP 200)
$E_2 = (2.5 + 6L/1000)$ µm (SprintMVP 250, 300)

$Z^{**} \quad E_1 = (3.8 + 8L/1000)$ µm (All Models)
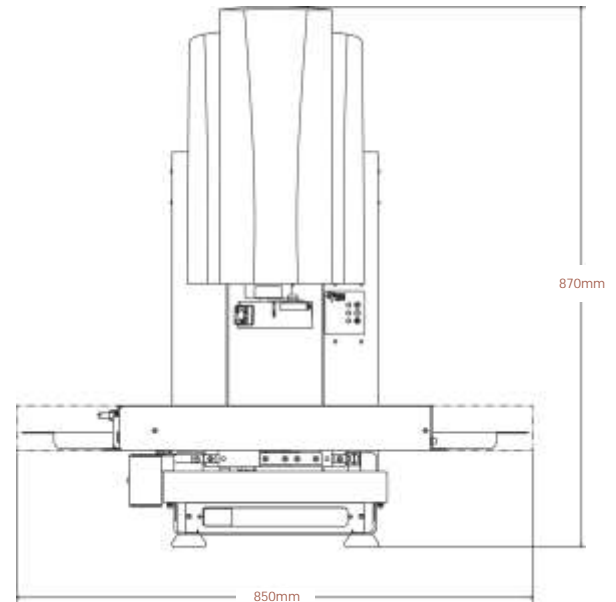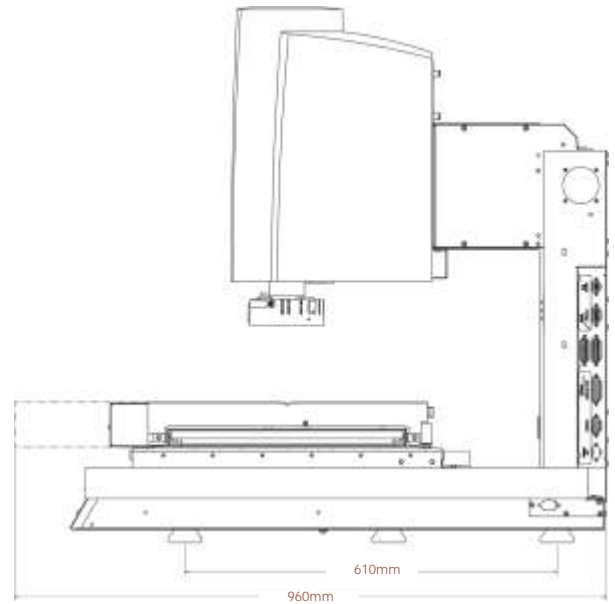
* Where L = Length in mm, with evenly distributed 5 kg load in the standard measuring plane. Depending on load distribution, accuracy at maximum rated load may be less than standard accuracy. XY axis artifact: 25 intersection grid reticle in the standard measuring plane. The standard measuring plane 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.

300 Model Shown

870mm
850mm
610mm
960mm

Manufactured by:

QUALITY VISION INTERNATIONAL INC.
Rochester, New York, USA

RAM Optical Instrumentation
RAM