Konica Minolta 910 Specifications

Type:
Non-contact 3-D LASER digitizer VIVID 910

Measuring Method:
Triangulation light block method

Auto-Focus method
Image surface Auto-Focus (contrast method), active Auto-Focus

Light-Receiving Lens (Interchangeable)
TELE: Focal distance f=25mm
MEDIUM: Focal distance f=14mm
WIDE: Focal distance f=8mm

Scan Range
0.6 to 2.5m (2m for WIDE)

Optimal 3D measurement Range
0.6 to 1.2m

Laser class
Class 2 (IEC 60825-1), "Eye safe" Class 1 (FDA)

Laser Scan Method
Galvanometer-driven rotating mirror

X Direction Input Range
(Varies with the distance)
111 to 463mm (TELE), 198 to 823 (MIDDLE), 359 to 1196mm (WIDE)

Y Direction Input Range
(Varies with the distance)
83 to 347mm (TELE), 148 to 618 (MIDDLE), 269 to 897mm (WIDE)

Z Direction Input Range
(Varies with the distance)
40 to 500mm (TELE), 70 to 800 (MIDDLE), 110 to 750mm (WIDE)

Precision (Z,Typ.)
+/- 0.008mm (Condition: FINE mode, Konica Minolta's standard)

Accuracy
+- 0.008mm (Condition: FINE mode, Konica Minolta's standard)

TELE X: +/- 0.22mm, Y: +/- 0.16mm, Z: +/- 0.10mm to the Z reference plane (Conditions: TELE/FINE mode, Konica Minolta's standard)

0.3 sec (FAST mode), 2.5 sec (FINE mode), 0.5 sec (COLOR)

Input Time

0.3 sec (FAST mode), 2.5 sec (FINE mode), 0.5 sec (COLOR)

Transfer Time to Host Computer

Approx. 1 sec (FAST mode), 1.5 sec (FINE mode)

Ambient Lighting Condition

Office Environment, 500 lux or less

Imaging Element

3-D data: 1/3-inch frame transfer CCD (340,000 pixels)
Color data: 3-D data is shared (color separation by rotary filter).

Number of Output Pixels

3-D data: 307,000 (for FINE mode), 76,800 (for FAST mode)
Color data: 640 x 480 x 24 bits color depth

Output Format

3-D data: Konica Minolta format & (STL, DXF, OBJ, AXCII points, VRML)
(Converted to 3-D data by the Polygon Editing Software/standard accessory
Color data: RGB 24-bit raster scan data)

Recording Medium

Compact Flash memory card (128MB)

Date File Size

Total 3-D and color data capacity: 1.6MB per data (for FAST mode), 3.6MB per data (for FINE mode)

Viewfinder

5.7-inch LCD (320 x 240 pixels)

Output Interface

SCSI II (DMA synchronous transfer)

Power

Commercial AC power 100 to 240V (50 to 60Hz), rated current 0.6A (when 100Vac is input)

Dimensions

213 (W) x 413 (H) x 271 (D) mm
(8-3/8 (W) x 16-1/4 (H) x 10-11/16 (D) inches

Weight

Approx. 11kg (25 lbs)

Operating Environment

temperature: 10 to 40 degrees C (50 to 104 degrees F); relative humidity 65% or less with no condensation, Pollution degree: 2, Installation category: II

Storage Temperature & Humidity Range

-10 to 50 degrees C (14 to 122 degrees F); relative humidity 85% or less (at 35 degrees C/95 degrees F) with no condensation

Resolution and Range of Digitized Volumes (X, Y, Z where x is the horizontal dimension of the focal plane, y is the vertical axis, z is distance from the sensor, units are millimeters), Field of View varies based on distance between VIVID and scanned object.

LENS VS. FIELD & RESOLUTION

	Near field (@ 0.6 m)	Far field	Max resolution (depth)
Tele Lens:	111 x 84 x 40 mm	460 x 350 x 130 mm (@ 2.5 m)	0.039 mm (0.0016")
Mid Lens:	196 x 153 x 70 mm	830 x 622 x 220 mm (@ 2.5 m)	0.068 mm (0.0026")
Wide Lens:	355 x 266 x 92 mm	1200 x 903 x 400 mm (@ 2 m)	0.090 mm (0.0035")