

Machine Name : profiler

Brand : Thomas Keenes

Machine Model : VR-3200

Stock No. : 70336

Ex-factory Date :



Main Technical Parameters:

Applicable controller: VR-3000K

Observation and measurement range:

(1) Wide field mode:

Magnification on 15 inches Monitor 12x

Transverse (H) 24mm

Longitudinal (V) 18mm

Magnification on 15 inches Monitor 25x

Transverse (H) 12mm

Longitudinal (V) 9mm

Magnification on 15 inches Monitor 38x

Transverse (H) 8mm

Longitudinal (V) 6mm

Magnification on 15 inches Monitor 50x

Transverse (H) 6mm

Longitudinal (V) 4.5mm

(2) High magnification mode:

Magnification on 15 inches Monitor 40x

Transverse (H) 7.6mm

Longitudinal (V) 5.7mm

Magnification on 15 inches Monitor 80x

Transverse (H) 3.8mm

Longitudinal (V) 2.9mm

Magnification on 15 inches Monitor 120x

Transverse (H) 2.5mm

Longitudinal (V) 1.9mm

Magnification on 15 inches Monitor 160x

Transverse (H) 1.9mm

Longitudinal (V) 1.4mm

Zoom: 1x to 4 x

Measurable height:

(1) Wide field mode: 10mm (± 5 mm)

(2) High magnification mode: 1mm (± 0.5 mm) * 1

Display resolution: 0.1 μ m * 2

Repetition accuracy $\square 6$) :

(1) Height measurement: 0.5 μ m*3

(2) Width measurement: wide field mode: 1 μ m/high magnification mode: 0.5 μ m * 3

Measurement accuracy:

(1) Height measurement: $\pm 3 \mu$ m * 3

(2) Width measurement: wide field mode: $\pm 5 \mu$ m/high magnification mode: $\pm 2 \mu$ m * 3

Connection function: fully automatic (XY automatic control+auto focus) measurement * 4
automatic adjustment, automatic template analysis * 4

Stage:

XY travel: 184 $\times$ 88 mm (electric)

Z travel: 90 mm (electric)

Rotating structure: $\pm 180^\circ$ (test sample rotating stage)

Inclined structure: more than $\pm 30^\circ$

Operating distance: 75 mm

Image receiving component: 1-inch, 4-megapixel and monochrome C-MOS

Light transmitting lens: twin telecentric lens x2

Light receiving lens: twin telecentric lens

Lighting system:

(1) Light source for observation: annular LED light (red, green, blue)

(2) Light source for measurement: white LED light

Image size: 1024 x 768 pix, 2048 x 1536 pix

Data processing section: dedicated PC designated by KEENS (OS is Windows7) * 5

Supply voltage: 100 to 240 VAC $\pm 10\%$, 50/60 Hz

Power consumption: 150 VA

Environmental resistance:

Ambient temperature: +15 to +30 $^\circ\text{C}$

Relative humidity: 35 to 80% RH (incondensable)

Weight: 28.0 kg

