



IM-8010

200 mm square stage Programmable Ringillumination Unit



Specifications

Model				IM-8010
Type				Head
Image sensor				1" 20 megapixel monochrome CMOS
Display				12.1" LCD monitor (WXGA: 1280 x 800)
Receiver lens				Double telecentric lens
Image mea- surement	Field of view	Wide-field measurement mode		200 mm × 200 mm (quadangle R50)
		High-precision measurement mode		125 mm×125 mm
	Minimum display unit			0.1 μm
	Repeatability	Wide-field measurement mode	Without stage movement	±1 μm
			With stage movement	±2 μm
		High-precision measurement mode	Without stage movement	±0.5 μm
			With stage movement	±1.5 μm
	Measurement accuracy (±2σ)	Wide-field measurement mode	Without binding	±3.9 μm*1
			With binding	±(7+0.02L) μm*2
		High-precision measurement mode	Without binding	±2μm*3
			With binding	±(4+0.02L) μm*4
	Outer diameter measurement	Measurement accuracy	Wide-field measurement mode	±(2.8+0.02D) μm*5
			High-precision measurement mode	±(1.4+0.04D) μm*6
External remote input				Non-voltage input (contact/solid-state)
External output	OK/NG/FAIL/MEAS.			PhotoMOS output Rated load: 24 VDC, 0.5 A ON resistance: 50 mΩ or less
External illumi- nation control	Intensity control			PWM control 100 kHz
	Output voltage			DC12V
	Output current			1.6 A (max.)
Interface	LAN			RJ-45 (10BASE-T/100BASE-TX/1000BASE-T)
	USB 3.1			4 ports (Rear: 4)
	USB 2.0 series A			4 ports (Front: 2, Rear: 2)
	Monitor output			DVI-D

Record	Hard disk drive	500 GB
Illumination system	Transparent	Telecentric transmissive illumination
	Ring	Four division multi-angle illumination (motorized) Slit ring (directional) illumination (motorized)
XY stage	Moving range	100 mm × 100 mm (motorized)
	Withstand load	5 kg
Z stage	Moving range	75 mm (motorized)
Power supply	Power voltage	100 to 240 V ±10% 50/60Hz
	Power consumption	430 VA max.
Environmental resistance	Ambient temperature	+10 to 35°C*7
	Relative humidity	20 to 80% RH (no condensation)
	Overvoltage category	II
	Pollution degree	2
Weight		Approx. 30 kg

*1 In the range of ø80 mm and the operating ambient temperature range of +23 ± 1°C at the focused focal point position

*2 In the range of 180 mm × 180 mm (quadangle R40), when the operating ambient temperature range of +23±1°C at the focused focal point position, and when the loading weight on the stage is 2 kg or less. L is a stage movement (mm).

*3 In the range of ø20 mm and the operating ambient temperature range of +23 ± 1°C at the focused focal point position.

*4 In the range of 120 mm × 120 mm, when the operating ambient temperature range of +23±1°C at the focused focal point position, and when the loading weight on the stage is 2 kg or less. L is a stage movement (mm).

*5 Range of L118 mm × ø60 mm. When the target is placed on the center of the lens field of view at the focal point and the target axis direction is facing the horizontal lens field of view. When the operating ambient temperature range is +23 ± 1°C and D is the Y direction distance (mm).

*6 Range of L106 mm × ø20 mm. When the target is placed on the center of the lens field of view at the focal point and the target axis direction is facing the horizontal lens field of view. When the operating ambient temperature range is +23 ± 1°C and D is the Y direction distance (mm).

*7 +15 to 35 when the XY stage speed is 80 mm/s.

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

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