



IM-8005

ø100 mm stage Model incorporating fixed ring-illumination unit



\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

Specifications

Model				IM-8005
Type				Head
Image sensor				1" 20-megapixel monochrome CMOS
Display				12.1" LCD monitor (WXGA: 1280 × 800)
Receiver lens				Double telecentric lens
Image measurement	Field of view	Wide-field measurement mode		ø100 mm <span>ø3.94"</span>
		High-precision measurement mode		25 × 25 mm <span>0.98" × 0.98"</span>
	Minimum display unit			0.1 μm
	Repeatability	Wide-field measurement mode	Without stage movement	±1 μm
			With stage movement	—
		High-precision measurement mode	Without stage movement	±0.5 μm
			With stage movement	—
	Measurement accuracy (±2σ)	Wide-field measurement mode	Without binding	±3.9 μm *1
			With binding	—
		High-precision measurement mode	Without binding	±2 μm *2
			With binding	—
	Outer diameter measurement	Measurement accuracy	Wide-field measurement mode	±(2.8 + 0.02 D) μm *3
			High-precision measurement mode	±(1.4 + 0.04 D) μm *4
Light probe measurement	Measurable area (XY)			—
	Maximum measurement depth			
	Light probe diameter			
	Measuring force			
	Repeatability			
	Measurement accuracy			
External remote input				Non-voltage input (with and without contact)
External output	OK/NG/FAIL/MEAS.			PhotoMos output Rated load: 24 VDC 0.5 A ON resistance: 50 mΩ or lower
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 transparent illumination
	Ring	Four division ring illumination
XY stage	Moving range	—
	Withstand load	5 kg
Z stage	Moving range	75 mm 2.95" (electric)
Power supply	Power voltage	100 to 240 VAC ±10%, 50/60 Hz
	Power consumption	430 VA or lower
Environmental resistance	Ambient temperature	+10 to 35°C +50°F to 95°F
	Relative humidity	20 to 80% RH (no condensation)
	Overvoltage category	II
	Pollution degree	2
Weight		Approx. 24 kg

\*1 In the range of ø80 mm 3.15", within the operating ambient temperature range of +23 ±1°C +73.4°F ±1.8°F at the focal point position.

\*2 In the range of ø20 mm 0.79", within the operating ambient temperature range of +23 ±1°C +73.4°F ±1.8°F at the focal point position.

\*3 Within the range of L18 mm × ø60 mm L0.71" × ø2.36". At the focal point position, with the part positioned in the center of the lens field of view, and with the shaft direction of the part facing the horizontal direction of the lens field of view. Within the operating ambient temperature range of +23 ±1°C +73.4°F ±1.8°F. D is the Y direction distance (in mm inch).

\*4 Within the range of L6 mm × ø20 mm L0.24" × ø0.79". At the focal point position, with the part positioned in the center of the lens field of view, and with the shaft direction of the part facing the horizontal direction of the lens field of view. Within the operating ambient temperature range of +23 ±1°C +73.4°F ±1.8°F. D is the Y direction distance (in mm inch).

# Dimensions

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

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