



## LM-1100

Head



## Specifications

Model		LM-1100		
Type		Head		
Image sensor		1", 20-mega pixel monochrome CMOS		
Display		10.4" LCD monitor (XGA: 1024 × 768)		
Receiver lens		Double telecentric lens		
Image measurement	Field of view	Wide-field measurement mode	225 mm × 125 mm 8.86" × 4.92"	
		High-precision measurement mode	206 mm × 106 mm 8.11" × 4.17"	
	Minimum display unit		0.1 μm	
	Repeatability	Inside camera's field of view (2σ)	Wide-field measurement mode	±0.5 μm
			High-precision measurement mode	±0.1 μm
		With stage movement	X/Y axis X/Y plane	±0.9 μm
	Measurement accuracy	Inside camera's field of view (2σ)	Wide-field measurement mode	±2 μm <sup>*1</sup>
			High-precision measurement mode	±0.7 μm <sup>*2</sup>
		With stage movement	X/Y axis (EU-X,MPE, EU-Y,MPE)	±(1.8 + 0.02 L) μm <sup>*3</sup>
			X/Y plane (EU-XY,MPE)	±(2.8 + 0.02 L) μm <sup>*3</sup>
AF height measurement	Repeatability		±2 μm	
	Measurement accuracy (EUZ,MPE)		±(4.8 + 0.04 L) μm <sup>*4</sup>	
External remote input		Non-voltage input (with and without contact)		
External output		OK/NG/FAIL/MEAS. PhotoMOS output Rated load 24 V DC, 0.5 A ON resistance 50 mΩ or lower		
Interface	LAN		RJ-45 (10BASE-T/100BASE-TX/1000BASE-T)	
	USB 3.1		2 ports (rear: 2)	
	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, multi-angle illumination (electric) Slit ring (directivity) illumination (electric) Telecentric coaxial illumination
External illumination control	Intensity control	PWM control, 100 kHz
	Output voltage	12 V DC
	Output current	1.6 A (max.)
XY stage	Moving range	200 mm × 100 mm <b>7.87" × 3.94"</b> (electric)
	Withstand load	7 kg
Z stage	Moving range	75 mm <b>2.95"</b> (electric)
Power supply	Power voltage	100 to 240 V AC ±10% (50/60 Hz)
	Power consumption	430 VA or lower
Environmental resistance	Ambient temperature	+10 to 35°C <b>+50 to 95°F</b> <sup>*5</sup>
	Relative humidity	20–80% RH (no condensation)
	Overvoltage category	II
	Pollution degree	2
Weight		Approx. 30 kg

\*1 In the range of 20 mm × 20 mm **0.79" × 0.79"** within the operating ambient temperature range of +23°C ±1°C **+73.4°F ±1.8°F** at the focused focal point position.

\*2 In the range of 5 mm × 5 mm **0.20" × 0.20"** within the operating ambient temperature range of +23°C ±1°C **+73.4°F ±1.8°F** at the focused focal point position

\*3 In accordance with ISO10360-7, within the operating ambient temperature range of +23°C ±1°C **+73.4°F ±1.8°F** at the focused focal point position, and with a load weighing 2 kg or less on the stage (L = amount of X/Y stage movement in mm units)

\*4 In accordance with ISO10360-7, within the operating ambient temperature range of +23°C ±1°C **+73.4°F ±1.8°F**, set to a maximum measurement of 50 mm **1.97"** or less, (L = amount of Z stage movement in mm units).

\*5 +15 to 35°C **+59 to 95°F** with X/Y stage travel speed of 80 mm/s.

## Dimensions

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

### ■ Head

