

## LS-9030M

Head: Standard model with monitor camera



## SPECIFICATIONS

Model	LS-9030M <sup>*1</sup>	
Type	Head: Standard model	
Measurement range	0.3 mm (0.08 mm) to 30 mm 0.01" (0.003") to 1.18"	
Smallest detectable object	0.3 mm (0.08 mm) 0.01" (0.003")	
Transmitter/receiver distance	160 ±40 mm 6.3" ±1.57"	
Repeatability	±0.1 μm 0.000004" <sup>*2</sup>	
Measurement accuracy	±2 μm 0.000079" <sup>*3</sup>	
Sampling cycle	16,000 samples/sec. <sup>*4</sup>	
Transmitter/receiver direction and position detection	Detection area	20 x 24 mm 0.79" x 0.94"
	Smallest detectable object	0.3 mm 0.01"
	Repeatability	±0.2 mm 0.01" <sup>*5</sup>
	Sampling cycle	4,000 samples/sec.
Light source	InGaN green LED	
Monitor camera	Provided	
Environmental resistance	Enclosure rating	IP67 (including connector)
	Ambient light	Incandescent lamp/Fluorescent lamp: 3,000 lux or lower
	Ambient temperature	0 to +50 °C 32 to 122 °F
	Relative humidity	20 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions
	Shock resistance	15 G/6 ms
Material	Aluminum	
Weight	Transmitter: Approx. 440 g Receiver: Approx. 500 g Base: Approx. 430 g	

<sup>\*1</sup> The values in brackets are measured in ultra-thin mode. For details on the accuracy of ultra-thin mode, contact the nearest KEYENCE office.

<sup>\*2</sup> A ±2σ margin of error when measuring a ø10 mm ø0.39" rod in the center of the measurement area using outer diameter mode with the average measurement number set as 2,048 times.

<sup>\*3</sup> Margin of error when a moving ø10 mm ø0.39" rod is measured in the 10 mm x 20 mm 0.39" x 0.79" measurement area using outer diameter mode.

<sup>\*4</sup> The sampling cycle is changed by the number of OUT set, and by the use of the mutual interference prevention function.

<sup>\*5</sup> A ±2σ margin of error when measuring the position of a ø10 mm ø0.39" rod in the center of the measurement area with the average measurement number set as 512 times.

Dimensions

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

ls\_9030\_9030m\_dimension\_01.gif

