



IA-100
Sensor Head



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

Specifications

Model		IA-100
Reference distance		100 mm 3.94"
Measurement range		75 mm to 130 mm 2.95" to 5.12"
Light source	Type	Red semiconductor laser, wavelength: 655 nm (visible light)
	Laser class	Class II (FDA (CDRH) Part1040.10) Class 2 (IEC 60825-1)
	Output	560 μW
Spot diameter (at standard distance)		Approx. 400 x 1,350 μm 15.75 x 53.15 Mil
Linearity		±0.15% of F.S. (F.S.=±20 mm 0.79", 80 to 120 mm 3.15" to 4.72")*1
Repeatability		10 μm 0.39 Mil*2
Sampling cycle		0.33/1/2/5 ms (4 levels available)
Operation status indicators		Laser warning: Green LED, Analog output: Red LED, Measurement center: Green LED
Temperature characteristics		0.06% of F.S./°C (F.S.=±20 mm 0.79", 80 to 120 mm 3.15" to 4.72")
Environmental resistance	Enclosure rating	IP67
	Ambient light	Incandescent lamp: 7,500 lux*3
	Ambient temperature	-10 to +50 °C 14 to 122 °F (No condensation or freezing)
	Relative humidity	35 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 axis
Material		Housing material: PBT Metal parts: SUS304 Packing: NBR Lens cover: Glass Cable: PVC
Weight		Approx. 130 g (including cable)

*1 Value when measuring the KEYENCE standard target (white diffuse object).
*2 Value when measuring the KEYENCE standard target (white diffuse object) at the reference distance, sampling rate: 1 ms, and average number of times: 16.
*3 Value when the sampling rate is set to 2 ms or 5 ms.

Dimensions

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

