



IL-065

Sensor heads



Specifications

Model		IL-065
Reference distance		65 mm 2.56"
Measurement range		55 to 105 mm 2.17" to 4.13"
Light source	Type	Red semiconductor laser, wavelength: 655 nm (visible light)
	Laser class	Class 2 (FDA (CDRH) Part1040.10) ^{*1} Class 2 (IEC 60825-1)
	Output	560 μ W
Spot diameter (at standard distance)		Approx. 550 × 1750 μ m
Linearity		$\pm 0.1\%$ of F.S. (55 to 75 mm 2.17" to 2.95") ^{*2,3}
Repeatability		2 μ m ^{*4}
Sampling rate		0.33/1/2/5 ms (4 levels available)
Operation status indicators		Laser emission warning indicator: Green LED, Analog range indicator: Orange LED, Reference distance indicator: Red/Green LED
Temperature characteristics		0.06% of F.S./°C ^{*5}
Environmental resistance	Enclosure rating	IP67
	Pollution degree	3
	Ambient light	Incandescent lamp: 7,500 lux ^{*6}
	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 directions
Material		Housing material: PBT, Metal parts: SUS304, Packing: NBR, Lens cover: Glass, Cable: PVC
Weight		Approx. 75 g

^{*1} The laser classification for FDA (CDRH) is implemented based on IEC 60825-1 in accordance with the requirements of Laser Notice No.50.

^{*2} Value when measuring the KEYENCE standard target (white diffuse object).

^{*3} F.S. of each model is as follows. IL-030: ± 5 mm ± 0.20 " IL-065: ± 10 mm ± 0.39 " IL-100: ± 20 mm ± 0.79 " IL-300: ± 140 mm ± 5.51 " IL-600: ± 400 mm ± 15.75 " IL-2000: +1000 to -1500 mm 39.37" to -59.05"

^{*4} Value when measuring the KEYENCE standard target (white diffuse object) at the reference distance, sampling rate: 1 ms, and average number of times: 128. For the IL-300/IL-600, the sampling rate is 2 ms. For the IL-2000, the sampling rate is set to 5ms.

^{*5} F.S. of each model is as follows. IL-030: ± 5 mm ± 0.20 " IL-065: ± 10 mm ± 0.39 " IL-100: ± 20 mm ± 0.79 " IL-300: ± 140 mm ± 5.51 " IL-600: ± 400 mm ± 15.75 "

^{*6} 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.

● IL-S065/IL-065/IL-S100/IL-100

