



IL-100

Sensor heads



Specifications

Model		IL-100
Reference distance		100 mm 3.94"
Measurement range		75 to 130 mm 2.95" to 5.12"
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 μW
Spot diameter (at standard distance)		Approx. 400 × 1350 μm
Linearity		±0.15% of F.S. (80 to 120 mm 3.15" to 4.72")* ^{2,3}
Repeatability		4 μm* 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.

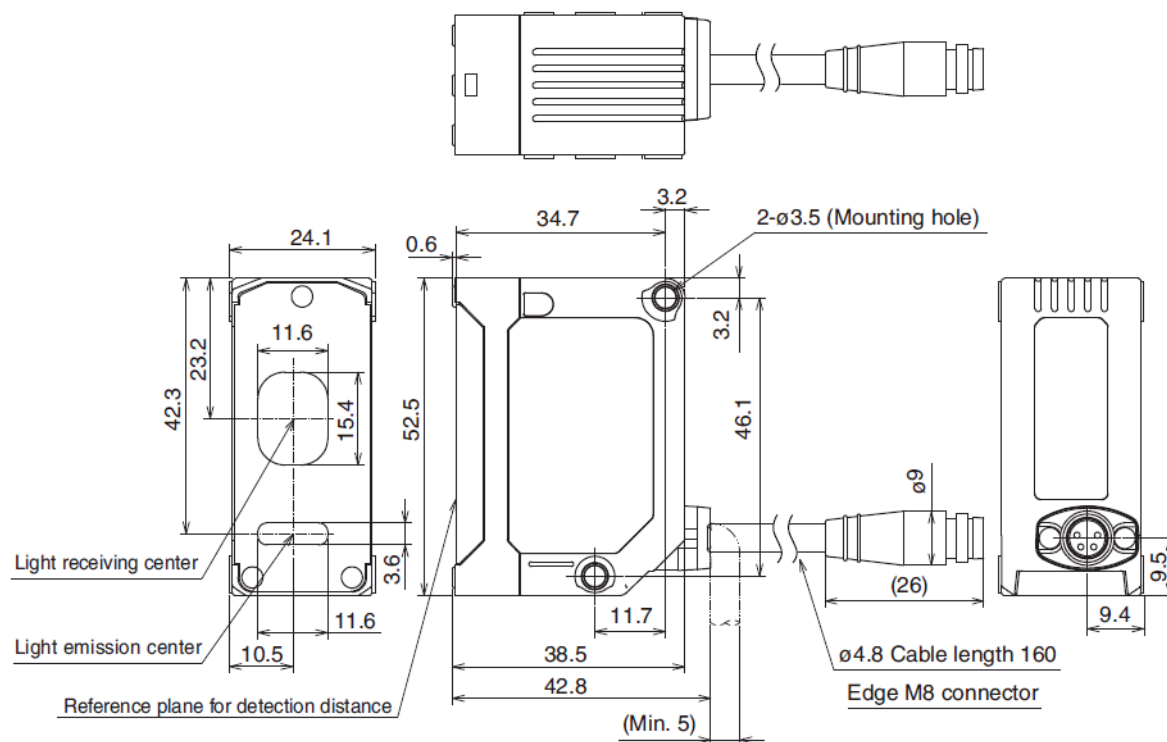
*⁵ F.S. of each model is as follows. IL-030: ±5 mm ±0.20" IL-065: ±10 mm ±0.39" IL-100: ±20 mm ±0.79" IL-300: ±140 mm ±5.51" IL-600: ±400 mm ±15.75"

*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



Mounting bracket

