



IL-300

Sensor heads



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

Specifications

Model	IL-300	
Reference distance	300 mm 11.81"	
Measurement range	160 to 450 mm 6.30" to 17.72"	
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. ø0.5 mm ø0.02"	
Linearity	±0.25% of F.S. (160 to 440 mm 6.30" to 17.32")* ^{2,3}	
Repeatability	30 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	0.08% of F.S./°C* ⁵	
Environmental resistance	Enclosure rating	IP67
	Pollution degree	3
	Ambient light	Incandescent lamp: 5,000 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. 135 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.

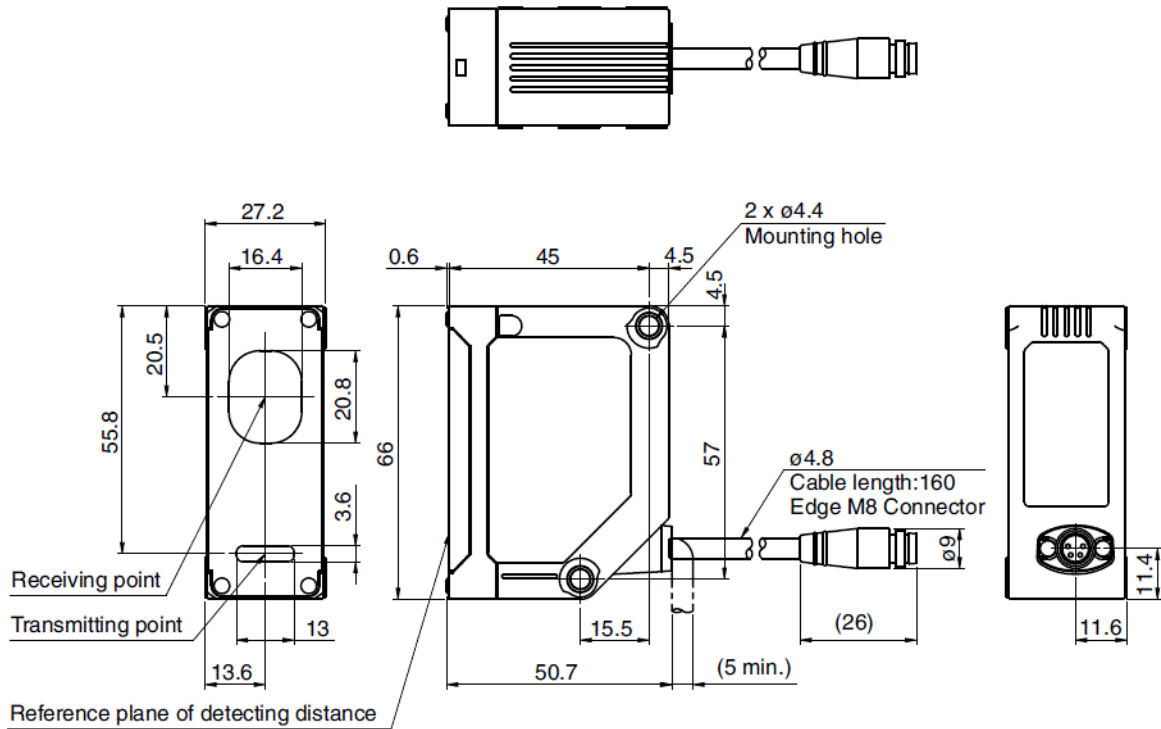
*⁵ F.S. of each model is as follows. IL-030: ±5 mm **±0.20"** IL-065: ±10 mm **±0.39"** IL-100: ±20 mm **±0.79"** IL-300: ±140 mm **±5.51"** IL-600: ±400 mm **±15.75"**

*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-300/IL-600**



Mounting bracket

