



IL-030

Sensor heads



Specifications

Model	IL-030	
Reference distance	30 mm	
Measurement range	20 to 45 mm	
Light source	Type	Red semiconductor laser, wavelength: 655 nm (visible light)
	Laser class	Class 1 (FDA (CDRH) Part1040.10)* ¹ Class 1 (IEC 60825-1)
	Output	220 μW
Spot diameter (at standard distance)	Approx. 200 x 750 μm	
Linearity	±0.1% of F.S. (25 mm to 35 mm)* ^{2,3}	
Repeatability	1 μm* ⁴	
Sampling rate	0.33/1/2/5 ms (4 levels available)	
Operation status indicators	Laser emission warning indicator: Green LED, Analogue range indicator: Orange LED, Reference distance indicator: Red/Green LED	
Temperature characteristics	0.05% of F.S./°C* ³	
Environmental resistance	Enclosure rating	IP67
	Pollution degree	3
	Ambient light	Incandescent lamp: 5,000 lux* ⁵
	Ambient temperature	-10 to +50 °C (No condensation or freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm, 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. 60 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 IL-065: ±10 mm IL-100: ±20 mm IL-300: ±140 mm IL-600: ±400 mm

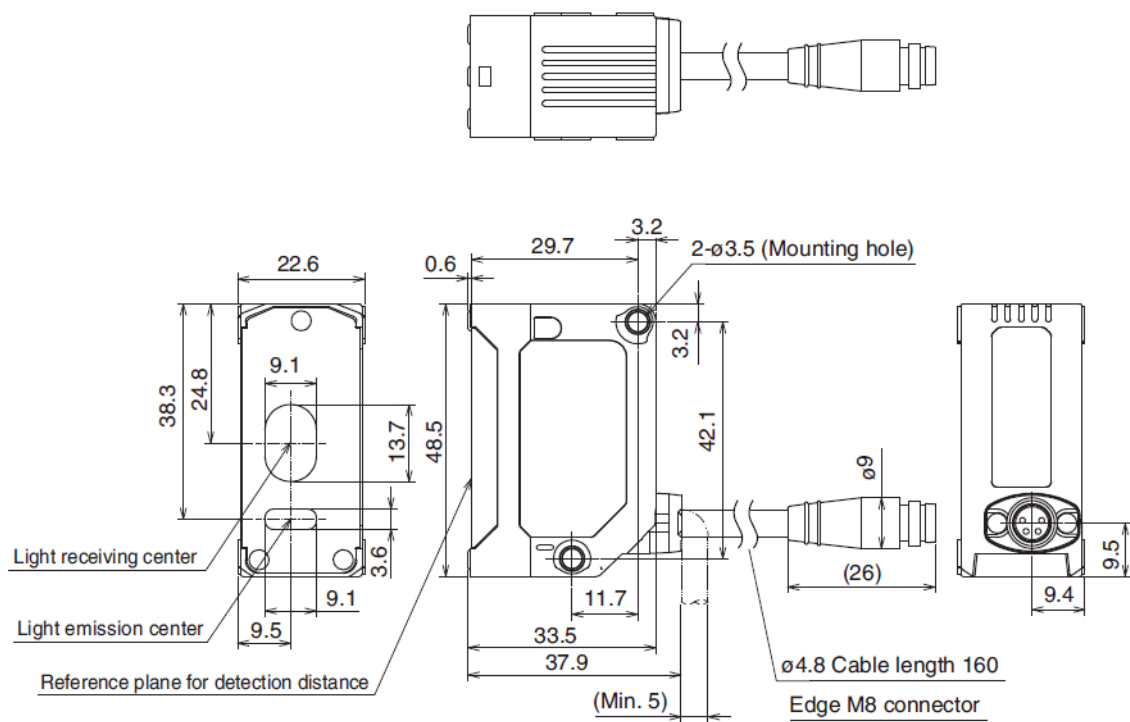
*4 Value when measuring the KEYENCE standard target (white diffuse object) at the reference distance, sampling rate: 1 ms, and average number of times: 128. For the IL-300/IL-600, the sampling rate is 2 ms.

*5 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-S025/IL-030



Mounting bracket

