



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 μW |
| Spot diameter (at standard distance) | Approx. 550 × 1750 μm | |
| Linearity | ±0.1% of F.S. (55 to 75 mm 2.17" to 2.95")* ^{2,3} | |
| Repeatability | 2 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.

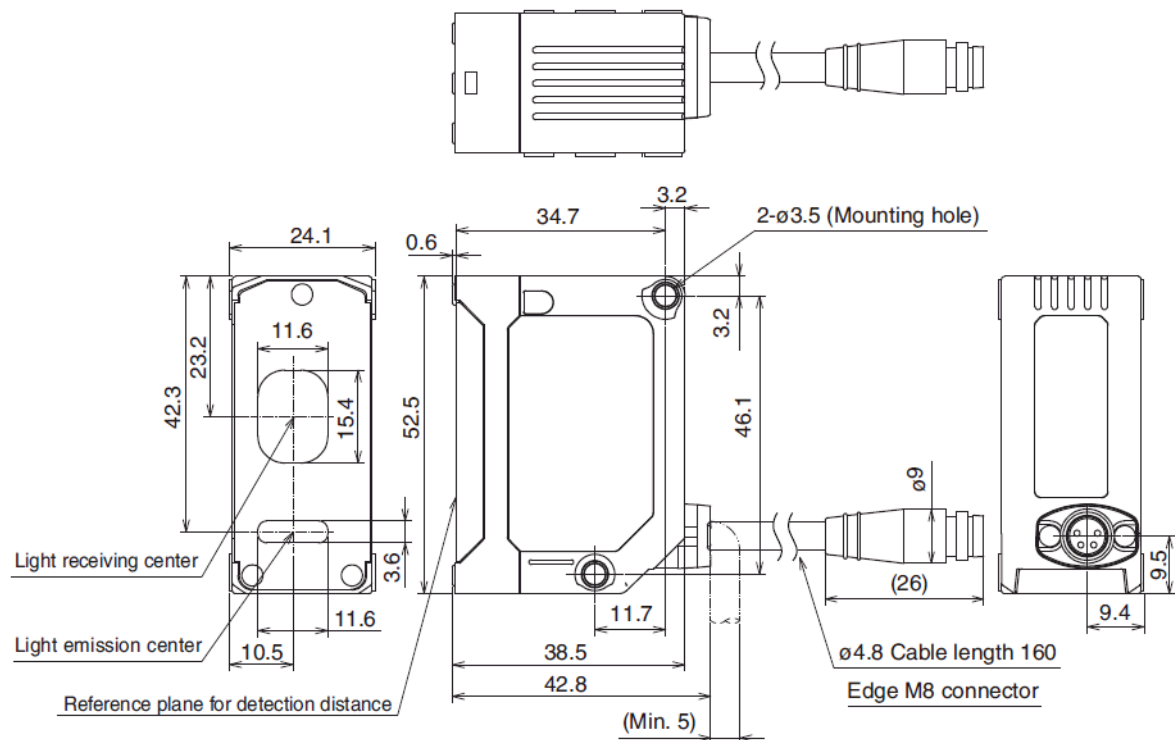
*⁵ F.S. of each model is as follows. IL-030: ±5 mm **±0.20"** IL-065: ±10 mm **±0.39"** IL-100: ±20 mm **±0.79"** IL-300: ±140 mm **±5.51"** IL-600: ±400 mm **±15.75"**

*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

