



LK-G507
Sensor Head: Ultra Long Distance, Wide beam



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

Specifications

Model		LK-G507
Reference distance		Diffused reflection: 500 mm 19.69", Specular reflection: 497.5 mm 19.59"
Measuring range		Diffused reflection: -250 to +500 mm -9.84" to 19.69", Specular reflection: -249 to +498 mm -9.80" to 19.61"*1*2
Light source	Type	Red semiconductor laser
	Wavelength	655 nm (visible light)
	Laser Class	Class II (FDA CDRH 21CFR PART1040.10)
	Output	0.95 mW
Spot diameter (at reference distance)		Approx. 300 x 9,500 μm 0.0118" x 0.3740"
Linearity		±0.05 % of F.S. (±250 μm ±0.0098")*3*4 -250 to +250 mm -9.84" to +9.84" High-accuracy range: ±0.02 % of F.S. (±100 μm ±0.0039") -250 to -50 mm -9.84" to -1.97" Long range: ±0.1 % of F.S. (±500 μm ±0.0197") -250 to +500 mm -9.84" to +19.69" (F.S. = ±250 mm ±9.84")*5
Repeatability		2 μm 0.000079"*6
Sampling frequency		20 / 50 / 100 / 200 / 500 / 1,000 μs (Selectable from 6 levels)
LED display		Near the center of the measurement: Green lights Within the measurement area: Orange lights Outside the measurement area: Orange flashing
Temperature characteristics		0.01 % of F.S./°C (F.S.= ±250 mm ±9.84")
Environmental resistance	Enclosure rating	IP67 (IEC60529)
	Ambient light	Incandescent lamp or Fluorescent lamp: 5,000 lux max.
	Ambient temperature	0 to +50 °C 32 to 122 °F
	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		Aluminum die-cast
Weight		Approx. 380 g (including the cable)

*1 The range is obtained by measuring KEYENCE's standard target (ceramic).
*2 When the sampling rate is 20 μs, the range becomes -230 mm -9.06" (NEAR side) to -250 mm -9.84" (NEAR side) for Diffused reflection. When the sampling rate is 20 μs, the range becomes -230 mm -9.06" (NEAR side) to -249 mm -9.80" (NEAR side) for specular reflection. When the sampling rate is 50 μs, the range becomes -125 mm -4.92" (NEAR side) to -250 mm -9.84" (NEAR side) for Diffused reflection. When the sampling rate is 50 μs, the range becomes -125 mm -4.92" (NEAR side) to -249 mm -9.80" (NEAR side) for specular reflection.
*3 All are calculated at F.S. = ±250 mm ±9.84".
*4 "High accuracy range" and "long range" refer to the linearity when those ranges are used.
*5 The range is obtained by measuring KEYENCE's standard target (ceramic) with the Standard mode.
*6 The range is obtained by measuring KEYENCE's standard (SUS) with 4,096 times of averaging at the reference distance.

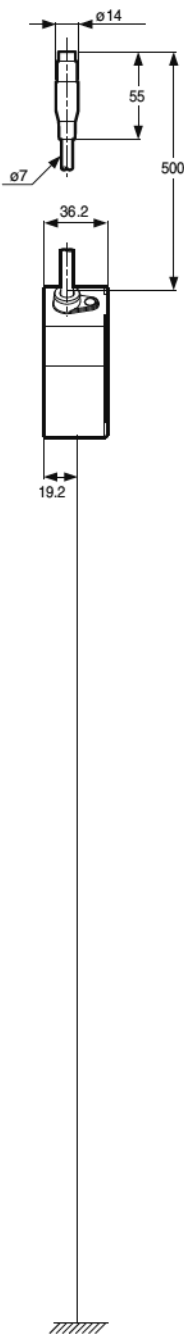
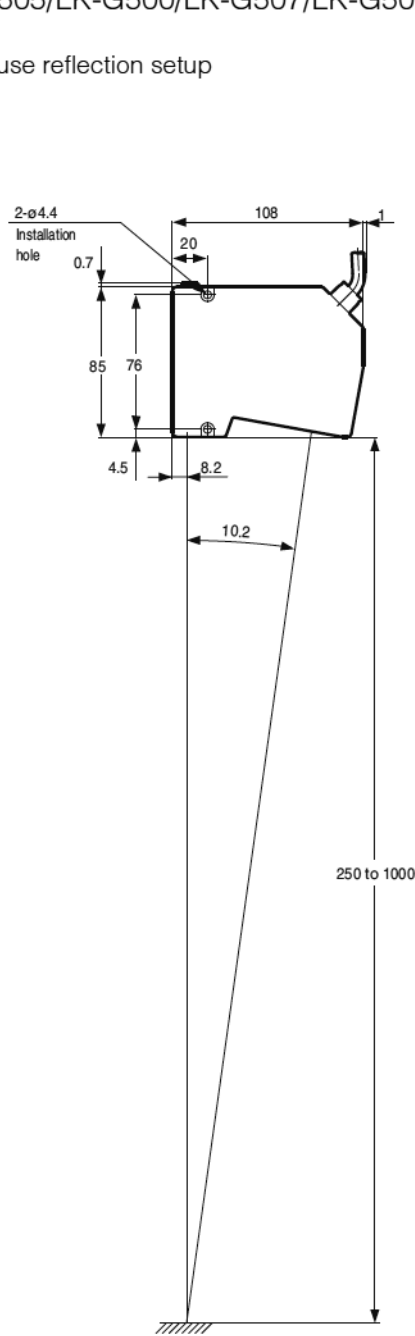
Dimensions

* Download CAD file or product manual for larger image/text and more detail.

lk-g500_head_2_dimension_01.gif

LK-G505/LK-G500/LK-G507/LK-G502

Diffuse reflection setup



Specular reflection setup

