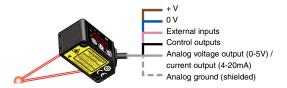


Micro Laser Distance Sensor

HG-C SERIES

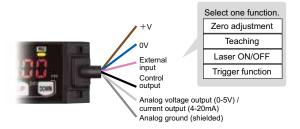


Analog voltage output (0-5V) / current output (4-20mA)



The sensor not only indicates measured values in mm, but also outputs analog voltage / current. The data can be used for various calculations and storage (logging) when the output is sent to a PLC + analog unit.

Configurable external input



The external input can be configured to perform one of four functions: zero adjustment, teaching, Laser ON/OFF, trigger function selection.

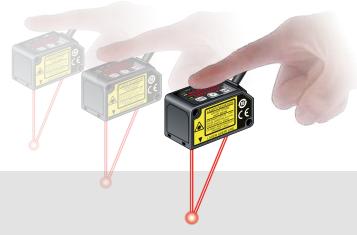
Measurement center distance: 400mm Measuring range: ±200mm Beam diameter: approx. 500µm Repeatability (200-400mm): 300µm Repeatability (400-600mm): 800µm 600mm

Measurement center distance: 200mm Measuring range: ±80mm Beam diameter: approx. 300µm Repeatability: 200µm

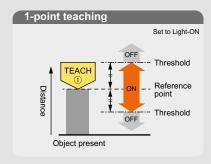
Measurement center distance: 100mm Measuring range: ±35mm Beam diameter: approx. 120µm Repeatability: 70µm

Measurement center distance: 50mm Measuring range: ±15mm Beam diameter: approx. 70µm Repeatability: 30µm

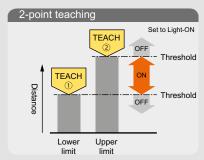
Measurement center distance: 30mm Measuring range: ±5mm Beam diameter: approx. 50µm Repeatability: 10µm



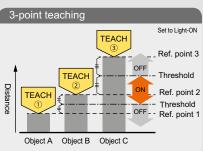
Teaching & window comparator mode



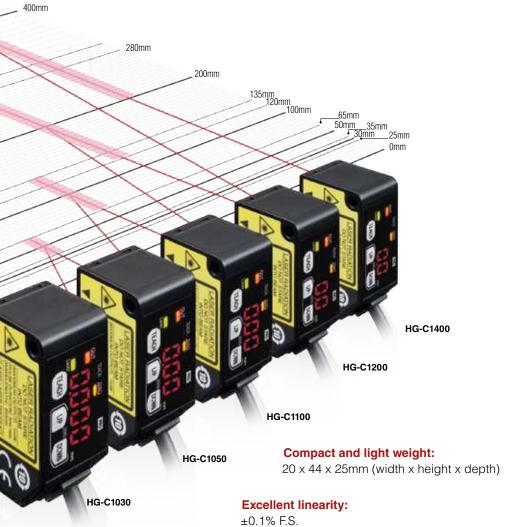
Perform 1-point teaching and the threshold range is set for the distance from the reference surface of the object to be detected.



Press the button TEACH once for the lower (first point) and once for the upper limit (second point). This is useful for detecting objects at different distances.

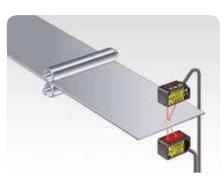


This is the method to set the threshold range by conducting the teaching at 3 points (detecting object A, B and C). After teaching, the reference points are automatically sorted in ascending order (reference point 1, 2 and 3). The thresholds are set at the midpoints between reference point 1 and 2, and 2 and 3, respectively. This is useful for detecting objects at different distances.



Reliable detection and overwhelmingly stable:

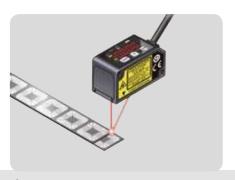
Repeatability of 10µm



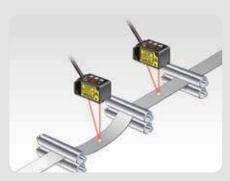
Measuring the thickness of a panel



Controlling the dispenser head height



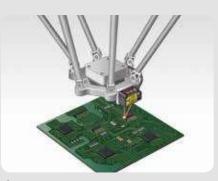
Checking for overlapped lead frames



Measuring the hoop slack



Checking for presence of O ring



Controlling the height of a robot

SPECIFICATIONS

NPN output		HG-C1030	HG-C1050	HG-C1100	HG-C1200	HG-C1400
PNP output		HG-C1030-P	HG-C1050-P	HG-C1100-P	HG-C1200-P	HG-C1400-P
Applicable standards		Conforming to EMC Directive and FDA Standard				
Measurement center distance		30mm	50mm	100mm	200mm	400mm
Measuring range		±5mm	±15mm	±35mm	±80mm	±200mm
Repeatability		10µт	30µт	70µт	200µm	300µm (200-400mm) 800µm (400-600mm)
Linearity		±0.1% F.S.			±0,2% F.S.	±0,2% F.S. (200-400mm) ±0,3% F.S. (400-600mm)
Beam diameter		Approx. 50μm	Approx. 70μm	Approx. 120μm	Approx. 300µm	Approx. 500μm
Supply voltage		12 to 24V DC ±10% including ripple max. 10% (P-P)				
Control output		PNP or NPN open-collector transistor				
	Output operation			Either Light-ON or Dark-ON		
	Short-circuit protection			Incorporated (auto-reset)		
Analog output		Voltage output: 0 to 5V (at alarm: +5.2V) / Output impedance: 100Ω Current output: 4 to 20mA (at alarm: 0mA) / Load impedance: 300Ω or less Switchable via settings				
Response time		Switchable between high speed (1.5ms), standard (5ms), and high precision (10ms)				
Degree of protection		IP67 (IEC)				
Ambient temperature		-10 to +45°C (no dew condensation or icing allowed), storage: -20 to +60°C				
Ambient humidity		35 to 85% RH, storage: 35 to 85% RH				
Ambient illumination		3000ℓx max. (illumination level of light receiving surface under incandescent light)				
Cable		5-core cable, 2m long				
Material		Casing: aluminum die-cast, front cover: acrylic				

You would like to receive a feasibility study or an offer? Please contact us:

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