



Advanced automation light grids MLG, MLG Analog Output

MLG1-2240N822



Model Name > [MLG1-2240N822](#)
Part No. > [1055186](#)



At a glance

- Two analog outputs: voltage to current
- Resolutions of 10 / 20 / 30 / 50 mm and customer-specific resolutions
- Working range up to 8.5 m
- Detection heights of over 3 m and up to 240 beams possible
- Short response time of
- Teach algorithm for optimal sensitivity settings in difficult applications, such as measuring translucent objects
- Easy-to-use setup software for customized applications with new features
- Software tools, such as height measurement, zoning, hole detection, and presence control make implementation of complex solutions achievable

Your benefits

- Intelligent evaluation software saves costs by quickly and easily turning a standard sensor into a custom problem solver, reducing the number of sensors, PLCs and programming required
- Easy-to-see status information helps avoid interrupting operation
- Different beam separation options, detection heights and output configurations ensure a reliable solution
- Integrated analog outputs reduce integration costs for measuring applications, because no additional software is necessary
- Discrete outputs for custom solutions without a PLC
- Tough metal housing stands up to harsh environments and reduces downtime



Features

Technology:	Sender/receiver
Task:	Measurement light grid
Minimum detectable object (MDO):	Parallel beam: ≥ 20 mm
Beam separation:	10 mm
Number of beams:	225
Detection height:	2,240 mm
Configuration:	Parameterization interface (measuring)

Performance

Maximum range ¹⁾ :	12 m
Minimum range:	Parallel beam: ≥ 0 mm
Response time ²⁾ :	Parallel beam: ≥ 34.75 ms
Working range ³⁾ :	8.5 m

1) No reserve for environmental issue and deterioration of the diode 2) With resistive load 3) Aperture $\pm 3^\circ$

Interfaces

Output type:	1 x NPN, 2 x Analog
Inputs:	1 x NPN
Connection type:	Connector M12, 8-pin
IO-Link:	0

Mechanics/electronics

Wave length:	IR 880 nm
Supply voltage Vs ¹⁾ :	DC 18 V ... 30 V
Power consumption sender ²⁾ :	590 mA
Power consumption receiver ³⁾ :	775 mA
Ripple:	< 5 Vpp
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	1 s
Dimensions (W x H x D):	34 mm x 2,314 mm x 29 mm
Housing material:	Aluminum
Indication:	7-segment display, LED
Synchronization:	Cable
Enclosure rating:	IP 65
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	5.652 kg
Power consumption:	590 mA ⁴⁾
Front screen:	PMMA

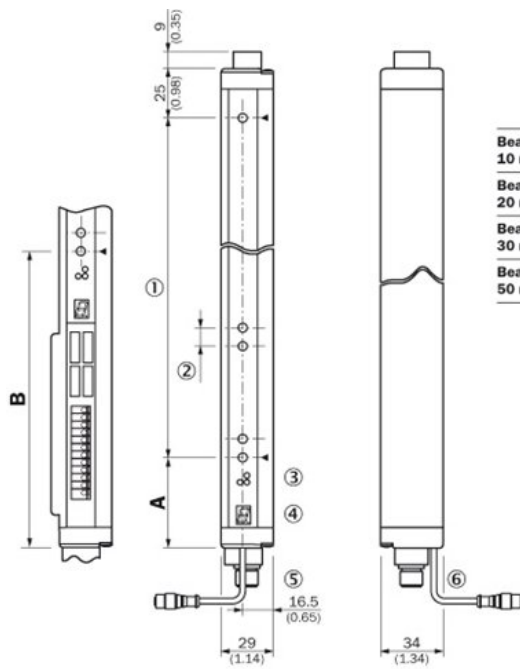
1) Without load 2) 3) 4) Without load with 24 V

Ambient data

Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -25 ... 55 °C, Storage: -40 ... 70 °C
Ambient light safety ¹⁾ , ²⁾ :	Direct: $\geq 12,500$ lx, Indirect: $\geq 50,000$ lx
Vibration resistance:	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)
Shock load:	10 g/IEC 68-2-29/16 ms

1) 2) Sunlight

Dimensional drawing

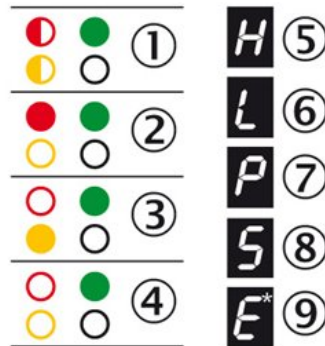
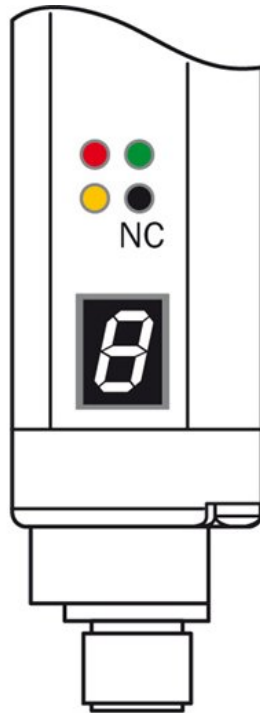


	A	B
Distance: MLG edge - first beam		
Beam separation MLG1 10 mm	49 (1.93)	160 (6.30)
Beam separation MLG2 20 mm	49 (1.93) ¹⁾	170 (6.69)
Beam separation MLG3 30 mm	59 (2.32) ²⁾	180 (7.09)
Beam separation MLG5 50 mm	89 (3.50)	200 (7.87)

¹⁾ With even number of beams.
²⁾ With odd number of beams.

- [1] Detection height (see optical performance)
- [2] Beam separation (10, 20, 30, 50 mm)
- [3] Status indicator: LEDs green, yellow, red
- [4] Indicator panel, 7-segment display
- [5] Terminals: M16 cable entry/connector M12, 12-pin
- [6] Configuration connector M8, 4-pin

Adjustments receiver



- ☼ blinks with 3 Hz
- on
- out
- ◐ on or out

- [1] Supply voltage
- [2] Device error
- [3] No object in the light path
- [4] Pollution indication
- [5] Blocked Beams Hold (BBH)
- [6] Activated teach-in procedure
- [7] ParamMode is active
- [8] standby
- [9] Error: E1 = sync. error; E2 = less receiver signal; E9 = defect

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