

OLM200-1008 OLM

OPTICAL LINEAR MEASUREMENT SENSORS





Ordering information

Туре	part no.
0LM200-1008	1058813

Other models and accessories → www.sick.com/OLM

Illustration may differ



Detailed technical data

Features

Measuring range	0 m 10,000 m ¹⁾
Resolution	0.1 mm, 1 mm, 10 mm, 100 mm
Repeatability	0.15 mm ²⁾
Response time	10 ms ³⁾
Output time	2.5 ms
Light source	LED, red
Accuracy of speed output	± 5 mm/s
Max. movement speed	7 m/s
Reading distance	100 mm, ± 20 mm
Barcode width	30 mm

 $^{^{1)}}$ Dependent on the set resolution and transfer protocol.

Interfaces

EtherNet/IP TM	✓
Digital input	Multifunctional input MF2
Digital output	
Number	1 ¹⁾
Туре	PNP / NPN
Function	Position, speed, control mark Q00 (off), Q01 (on), illumination on/off, service [failure (dirt/LED service life), no barcode tape, over/under temperature, out of measuring range 0 km > position > 10 km, internal error]

 $^{^{1)}}$ Via multifunctional output MF1.

²⁾ Statistical error 3 s, no warm-up time necessary.

³⁾ Response time of digital output.

²⁾ Outputs MF1 short-circuit protected.

Maximum output current $I_A \leq 100$ mA $^{2)}$

Electronics

Supply voltage V_s	DC 18 V 30 V ¹⁾
Ripple	≤ 5 V _{pp} ²⁾
Power consumption	< 5.5 W
Initialization time	10 s
Enclosure rating	IP65 (EN 60 529)
Protection class	III

¹⁾ Limit values, reverse-polarity protected.

Ambient data

Electromagnetic compatibility (EMC)	EN 61000-6-2, EN 61000-6-4 ¹⁾
Ambient temperature, operation	-30 °C +60 °C ²⁾
Ambient temperature, storage	-40 °C +75 °C ³⁾
Typ. Ambient light immunity	\leq 5,000 lx $^{4)}$
Vibration resistance	DIN/EN 60068-2-6, DIN/EN 60068-2-64
Shock resistance	DIN/EN 60068-2-27

 $^{^{1)}}$ This is a Class A device. This device can cause radio interference in living quarters.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓
Ethernet/IP certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

¹⁾ Via multifunctional output MF1.

²⁾ Outputs MF1 short-circuit protected.

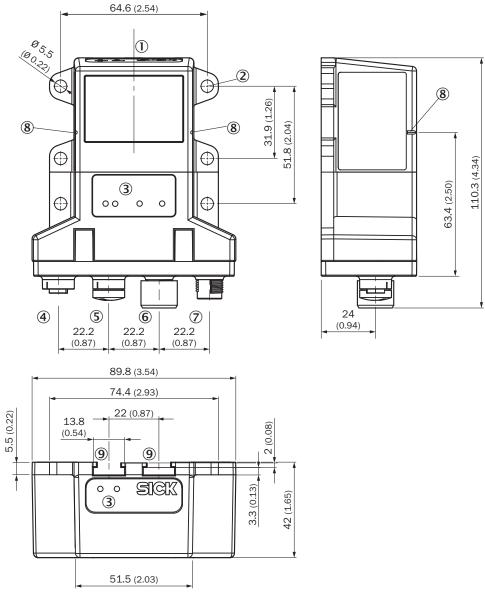
 $^{^{\}rm 2)}$ May not fall below or exceed U $_{\rm V}$ tolerances.

 $^{^{2)}}$ Temperatures < –20 $^{\circ}\text{C}$ with 5 min warm-up time.

 $^{^{\}rm 3)}$ Max. 95 % humidity, non-condensing.

 $^{^{4)}}$ Typ. value at +25 $^{\circ}\text{C}$ ambient temperature.

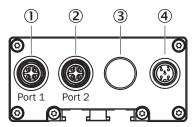
Dimensional drawing



Dimensions in mm (inch)

- 1 Reference axis position measurement
- ② Mounting holes
- ③ status LED [status]
- ④ Ethernet port 1, M12 female connector, 4-pin
- ⑤ EtherNet port 2, socket M12, 4-pin
- 6 Not assigned
- 7 Connector M12, 5-pin
- Adjustment aid (slot)
- 9 T-slot

Connection type



- ① Ethernet port 1, M12 female connector, 4-pin
- ② EtherNet port 2, socket M12, 4-pin
- 3 Not assigned
- 4 Connector M12, 5-pin

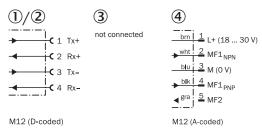
Ethernet connection diagram



M12 (D-coded)

- ① Ethernet port 1, M12 female connector, 4-pin
- ② Ethernet port 1, M12 female connector, 4-pin

Connection diagram



- ① Ethernet, M12 female connector, 4-pin
- ② Ethernet, M12 female connector, 4-pin
- 3 Not assigned
- 4 Connector M12, 5-pin

Recommended accessories

Other models and accessories → www.sick.com/OLM

	Brief description	Туре	part no.	
Mounting systems				
	 Description: Sliding nut set, M5, 4x Packing unit: 4 pieces Items supplied: Included in delivery 	Sliding nuts	2017550	
connectors ar	connectors and cables			
	 Connection type head A: Female connector, M12, 4-pin, straight, D-coded Signal type: Ethernet Cable: CAT5, CAT5e Description: Ethernet, shielded Connection systems: IDC quick connection Permitted cross-section: 0.14 mm² 0.34 mm² 	DOS-1204-GE	6048153	
	 Connection type head A: Female connector, M12, 4-pin, straight Connection type head B: Male connector, M12, 4-pin, straight Signal type: Ethernet Cable: 4-wire Description: Ethernet, unshielded Note: Connection cable, extension cable 1:1, shielded, for TTK70 inspector 	EtherNet/IP adapter	2044264	
	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, M12, 4-pin, straight, D-coded Signal type: Ethernet Cable: 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free Description: Ethernet, shielded 	SSL-1204-G02ME90	6045222	
	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Male connector, RJ45, 8-pin, straight Signal type: Ethernet Cable: 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free Description: Ethernet, shielded 	SSL-2J04-G02ME60	6047916	
80	 Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Male connector, RJ45, 8-pin, straight Signal type: Ethernet Cable: 5 m, 4-wire, CAT5, CAT5e, PUR, halogen-free Description: Ethernet, shielded 	SSL-2J04-H05ME	6045287	
	 Connection type head A: Male connector, RJ45, 4-pin, straight Signal type: Ethernet, PROFINET Cable: CAT5, CAT5e Description: Ethernet, shieldedPROFINET Connection systems: IDC quick connection Permitted cross-section: 4 mm² 8 mm² 	STE-0J04-GZ	6048260	
Co	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Signal type: Ethernet Cable: CAT5, CAT5e Description: Ethernet, shielded Connection systems: IDC quick connection Permitted cross-section: 0.14 mm² 0.34 mm² 	STE-1204-GE01	6048151	
	Connection type head A: Male connector, M12, 4-pin, angled, D-coded Signal type: Ethernet Cable: CAT5, CAT5e Description: Ethernet, shielded Connection systems: IDC quick connection Permitted cross-section: 0.14 mm² 0.34 mm²	STE-1204-WE	6048152	
70	 Connection type head A: Male connector, M12, 4-pin, straight, D-coded Connection type head B: Flying leads Signal type: Ethernet Cable: 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free Description: Ethernet, shielded 	STL-1204-G02ME90	6045284	
	 Connection type head A: Male connector, M12, 4-pin, angled, D-coded Connection type head B: Flying leads Signal type: Ethernet Cable: 5 m, 4-wire, CAT5, CAT5e, PUR, halogen-free Description: Ethernet, shielded 	STL-1204-W05ME90	6047913	

	Brief description	Туре	part no.
Codes			
	Product family: Positioning codes Description: 30 mm, height: 60 mm, measuring range: customer-specific	Customer-specif- ic bar code tape	5327812
	Product family: Positioning codes Description: 30 mm, height: 100 mm, measuring range: customer-specific	Customer-specif- ic bar code tape	5327576
	 Product family: Positioning codes Description: 30 mm, height: 25 mm, measuring range: customer-specific 	Customer-specif- ic bar code tape	5328960
	 Product family: Positioning codes Description: 30 mm, height: 40 mm, measuring range: customer-specific 	Customer-specif- ic bar code tape	5323951
	 Product family: Positioning codes Description: 30 mm, height: 30 mm, measuring range: customer-specific 	Customer-specif- ic bar code tape	5322556

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