




OSM300 SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Long laser distance sensor	<b>CONNECTION TYPES</b> (see table)
<b>SIZE</b>	104.5 × 69.6 × 77.9 mm	<ul style="list-style-type: none"> <li>M12 connector</li> </ul>
<b>OPERATING DISTANCE</b>	See table	A-coded 
<b>DETECTION MODE</b>	Retro-reflective ranging	B-coded 
		D-coded 

TECHNICAL DATA

<b>OPERATING VOLTAGE</b>	10 ... 30 V DC	<b>MAXIMUM MOVEMENT SPEED</b>	15 m / s
<b>RIPPLE VOLTAGE</b>	≤ 10 %	<b>MAXIMUM ACCELERATION</b>	≤ 15 m/s <sup>2</sup>
<b>LIGHT SOURCE</b>	Red laser (650nm) / class 2	<b>HOUSING MATERIAL</b>	Housing: Die -cast aluminum Front screen: PMMA
<b>LIGHT SPOT SIZE</b>	5 mm + (2 mm × distance, unit: meter)	<b>VOLTAGE WITHSTANDING</b>	650 V/AC, 50/60 Hz, 60 s
<b>REPEATABILITY</b>	2 mm	<b>REVERSE POLARITY PROTECTION</b>	Yes
<b>RESPONSE TIME</b>	2 ms	<b>OVERLOAD RESISTANCE</b>	Yes
<b>DISPLAP</b>	6-digit OLED display	<b>SHORT CIRCUIT PROTECTION</b>	Yes
<b>RESOLUTION</b>	0.1 mm, 0.125 mm, 1 mm, 10 mm, 100 mm available	<b>MTTF</b>	25 years

ENVIRONMENTAL CONDITIONS

<b>OPERATING ENVIRONMENT HUMIDITY</b>	35 % to 85 % RH (no condensation)	<b>INSULATION IMPEDENCE</b>	≥ 20 MΩ (500 V DC)
<b>PROTECTION CLASS</b>	IP67	<b>SHOCK RESISTANCE (EN 60068-2-27)</b>	500 m/s <sup>2</sup> (50 G) 3 times X, Y, Z respectively
<b>STORAGE TEMPERATURE</b>	-40 ... +70 °C	<b>IMPACT RESISTANCE (EN 60068-2-6)</b>	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
<b>AMBIENT TEMPERATURE</b>	-20 ... +55 °C	<b>ANTI-AMBIENT LIGHT</b>	≤ 100,000 lx

STANDARDS AND DIRECTIVES

<b>EMC DIRECTIVE 2014/30/EU</b>	EN IEC 60947-5-2	<b>ROHS DIRECTIVE 2011/65/EU</b>	EN IEC 63000
---------------------------------	------------------	----------------------------------	--------------

OSM300 SERIES

APPROVALS



DETECTION MODE DIFFUSE RANGING

Article number	Operating distance	Light source	Interface	Connection	Dimensions
OSM300-RPL100EIPSIQ12	0.15 ... 100 m <sup>1)</sup>	Red laser	Ethernet/IP (WD2) + SSI (WD3)	M12 connector	see Fig. 1
OSM300-RPL100PNSIQ12	0.15 ... 100 m <sup>1)</sup>	Red laser	Profinet (WD2) +SSI (WD3)	M12 connector	see Fig. 1
OSM300-RPL30EIPSIQ12	0.15 ... 30 m	Red laser	Ethernet/IP (WD2) + SSI (WD3)	M12 connector	see Fig. 1
OSM300-RPL30PNSIQ12	0.15 ... 30 m	Red laser	Profinet (WD2) +SSI (WD3)	M12 connector	see Fig. 1

<sup>1)</sup> On the reflective film 'Diamond Grade'

<sup>2)</sup> Install accessories

Air-cooled module (optional): EOSM300-FLT

Fixed bracket (optional): EOSM300-1 can be used alone; EOSM300-2 must be used together with EOSM300-1

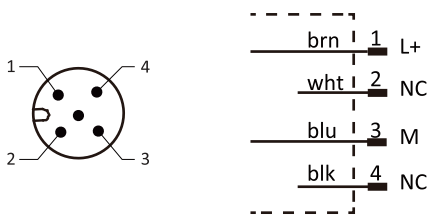
Reflective Stickers (optional): RT200\*200 (Size 200\*200 mm); RT400\*400 (Size 400\*400 mm); RT600\*600 (Size 600\*600 mm)

<sup>3)</sup> Cable Accessories (Recommended) :

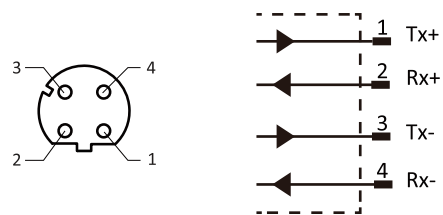
Power cable: CO12.4- ; Network cable: E16DA4002M00; SSI communication cable: CO12.5- /WS-BC; (represents cable length)

WIRING DIAGRAMS

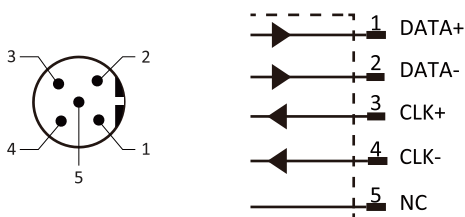
WD1



WD2



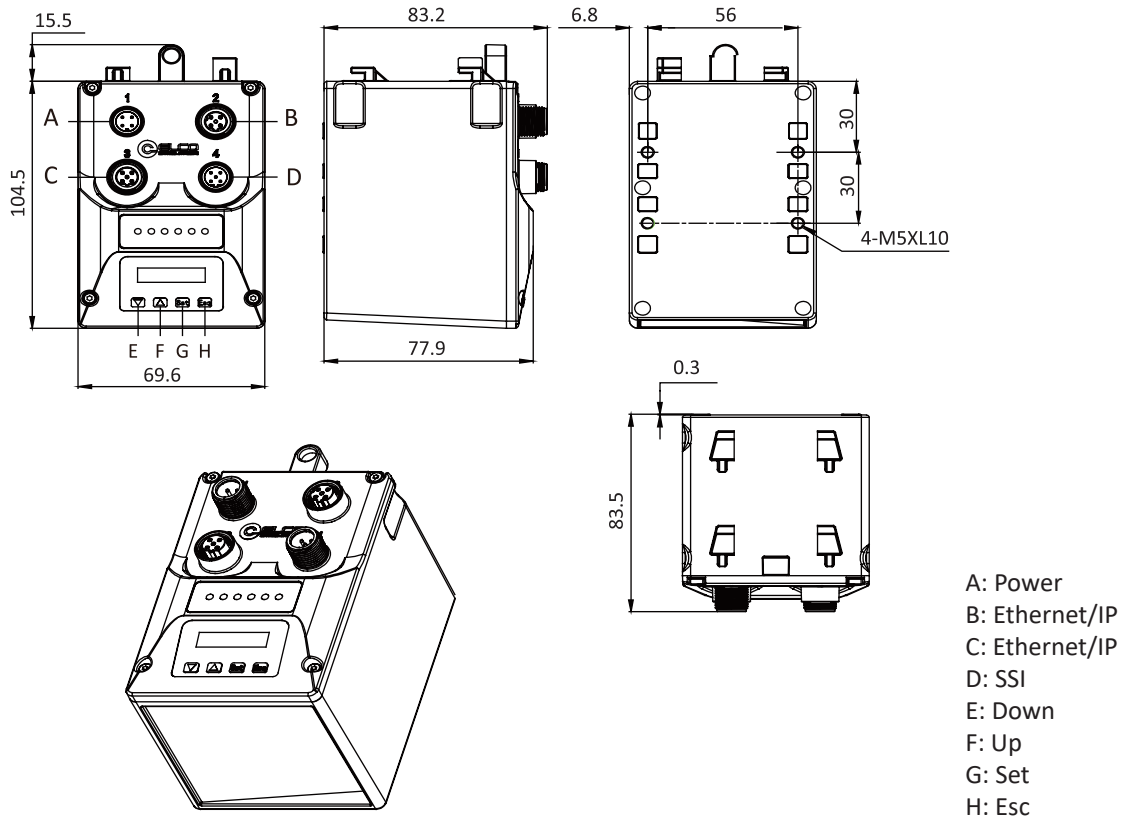
WD3



OSM300 SERIES

DIMENSIONS (mm)

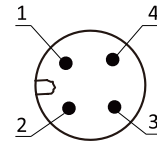
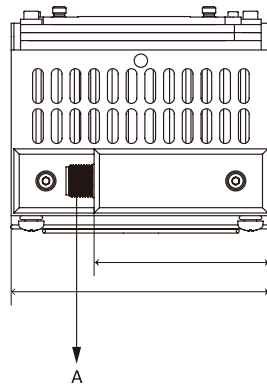
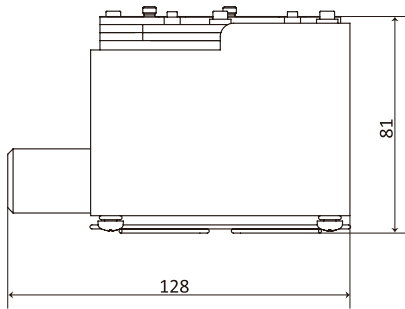
Fig. 1 Connector



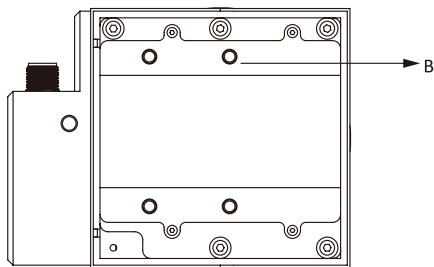
OSM300 SERIES

INTALL ACCESSORIES ( OPTIONAL)

Air-cooled module: EOSM300-FLT



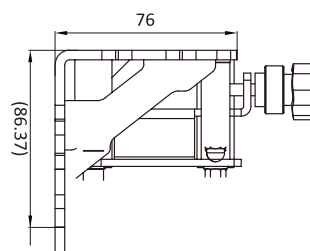
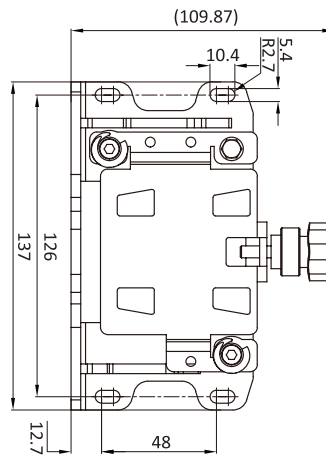
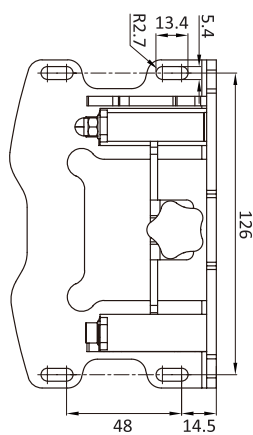
1 / 2 : VCC 24 V+  
3 / 4 : GND 0 V



A: Power  
B: With sensor mounting hole

INTALL ACCESSORIES ( OPTIONAL)

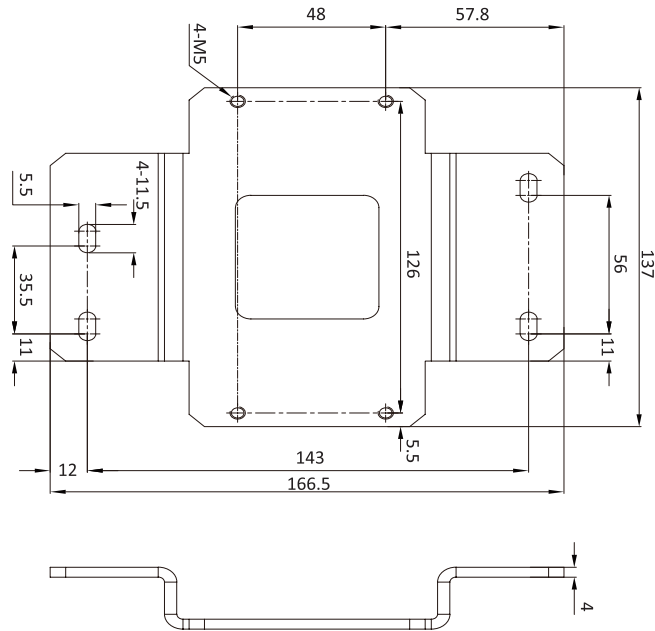
EOSM300-1



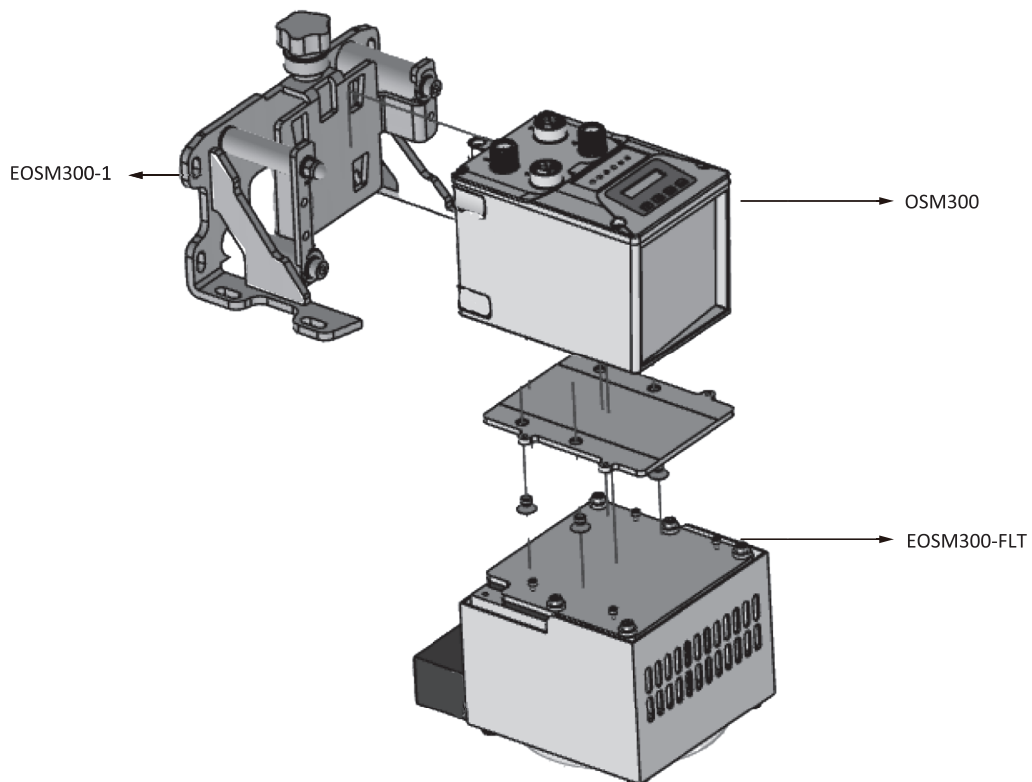
OSM300 SERIES

INSTALL ACCESSORIES ( OPTIONAL)

EOSM300-2



INSTALLATION DIAGRAM



## OSM300 SERIES

---

### SALES AND SERVICE

**Tianjin Elco Automation Co., Ltd**

No. 12, 4th XEDA Branch Road  
Xiqing Economic-Technological Development Area  
Tianjin 300385, P.R. China  
Office Phone: 022 23788282  
E-Mail: [info@elco.cn](mailto:info@elco.cn)  
[www.elco-holding.com.cn](http://www.elco-holding.com.cn)

**Elco Industrie Automation GmbH**

Benzstrasse 7  
71720 Oberstenfeld,  
Deutschland  
Office Phone: +49 7062 / 6599-260  
E-Mail: [info@elco-automation.de](mailto:info@elco-automation.de)  
[www.elco-automation.de](http://www.elco-automation.de)

**Elco Automation LLC**

1097 Highway 101 South, Suite D-3 Greer  
South Carolina 29651, USA  
Office Phone: +1 864-581-7431  
E-Mail: [infousa@elcoautomation.com](mailto:infousa@elcoautomation.com)  
[www.elcoautomation.com](http://www.elcoautomation.com)

**Elco Industrial Automation Pvt Ltd.**

No 80, 1<sup>st</sup> Main, 2<sup>nd</sup> Cross, Royal Enclave,  
Sidedahalli, Nagasandra Bangalore 560073, India  
Office Phone: +91-7259931777  
E-Mail: [info@elcoautomation.in](mailto:info@elcoautomation.in)  
[www.elcoautomation.com](http://www.elcoautomation.com)

**Elco Automation Korea Ltd.**

706, 17 Daehak 4-ro, Yeongtong-gu, Suwon-si,  
Gyeonggi-do, Republic of Korea, 16226  
Office Phone: +82-31-216-7890  
E-Mail: [sales@elcoautomation.co.kr](mailto:sales@elcoautomation.co.kr)  
[www.elcoautomation.com](http://www.elcoautomation.com)