High-Performance Distance Sensor

OCP662P0150E

Part Number



- CMOS line array
- Industrial Ethernet
- Measured value independent of material, color and brightness
- Web server and graphic display for simple operation

Technical Data

LASER

| Working Range 60660 mm Measuring Range 600 mm Reproducibility maximum 701000 µm Linearity Deviation 1001000 µm Light Source Laser (red) Wavelength 655 nm Service Life (T = +25 °C) 100000 h Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data 1 Port Type 100BASE-TX PoE Class 1 Output rate 330 /s Temperature Drift < 50 µm/K Temperature Range -2550 °C Reverse Polarity Protection yes Interface EtherNet/IP™ Protection Class III Mechanical Data June Setting Method Menu (OLED) Housing Material Metal Degree of Protection IP68 Connection Diagram No. 001 Connection Diagram No. 001 Connection Diagram No. 001 <th>Optical Data</th> <th></th> | Optical Data | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------|
| Reproducibility maximum 701000 µm Linearity Deviation 1001000 µm Light Source Laser (red) Wavelength 655 nm Service Life (T = +25 °C) 100000 h Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data - Port Type 100BASE-TX PoE Class 1 Output rate 330 /s Temperature Drift < 50 µm/K | Working Range | 60660 mm |
| Linearity Deviation 1001000 µm Light Source Laser (red) Wavelength 655 nm Service Life (T = +25 °C) 100000 h Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data 1 Port Type 100BASE-TX Pot Type 100BASE-TX Pot Class 1 Output rate 330 /s Temperature Drift < 50 µm/K | Measuring Range | 600 mm |
| Light SourceLaser (red)Wavelength 655 nm Service Life (T = +25 °C)100000 hLaser Class (EN 60825-1)1Max. Ambient Light10000 LuxLight Spot Diameter $3,6 \times 0,9 \text{ mm}$ Electrical Data $100BASE-TX$ Port Type100BASE-TXPot Class1Output rate330 /sTemperature Drift $< 50 \ \mu m/K$ Temperature Range $-2550 \ °C$ Reverse Polarity ProtectionyesInterfaceEtherNet/IPTMProtection ClassIIIMechanical DataUIISetting MethodMenu (OLED)Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataJWeb serveryesEtherNet/IPTM \bullet Connection Diagram No.001Connection Equipment No.50 | Reproducibility maximum | 701000 μm |
| Wavelength 655 nm Service Life (T = +25 °C) 100000 h Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data 1 Port Type 100BASE-TX PoE Class 1 Output rate 330 /s Temperature Drift < 50 µm/K | Linearity Deviation | 1001000 μm |
| Service Life (T = +25 °C) 100000 h Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data 1 Port Type 100BASE-TX PoE Class 1 Output rate 330 /s Temperature Drift < 50 μm/K | Light Source | Laser (red) |
| Laser Class (EN 60825-1) 1 Max. Ambient Light 10000 Lux Light Spot Diameter 3,6 × 0,9 mm Electrical Data Port Type 100BASE-TX PoE Class 11 Output rate 330 /s Temperature Drift < 50 µm/K Temperature Range -2550 °C Reverse Polarity Protection yes Interface EtherNet/IPTM Protection Class III Mechanical Data Setting Method Menu (OLED) Housing Material Metal Degree of Protection IP68 Connection M12 × 1; 8-pin, X-cod. Safety-relevant Data MTTFd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IPTM Connection Diagram No. Control Panel No. Suitable Connection Equipment No. 50 | Wavelength | 655 nm |
| Max. Ambient Light10000 LuxLight Spot Diameter3,6 × 0,9 mmElectrical Data100BASE-TXPot Type100BASE-TXPoE Class1Output rate330 /sTemperature Drift< 50 μm/K | Service Life (T = +25 °C) | 100000 h |
| Light Spot Diameter3,6 × 0,9 mmElectrical Data100BASE-TXPot Type100BASE-TXPoE Class1Output rate330 /sTemperature Drift< 50 μm/K | Laser Class (EN 60825-1) | 1 |
| Electrical DataPort Type100BASE-TXPoE Class1Output rate330 /sTemperature Drift< 50 µm/K | Max. Ambient Light | 10000 Lux |
| Port Type100BASE-TXPoE Class1Output rate330 /sTemperature Drift<50 µm/K | Light Spot Diameter | 3,6 × 0,9 mm |
| PoE Class1Output rate330 /sTemperature Drift< 50 μm/K | Electrical Data | |
| Output rate330 /sTemperature Drift< 50 µm/K | Port Type | 100BASE-TX |
| Temperature Drift< 50 μm/K | PoE Class | 1 |
| Temperature Range-2550 °CReverse Polarity ProtectionyesInterfaceEtherNet/IPTMProtection ClassIIIMechanical DataIIISetting MethodMenu (OLED)Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataJWTTFd (EN ISO 13849-1)350,69 aWeb serveryesEtherNet/IPTM001Connection Diagram No.001Control Panel No.50 | Output rate | 330 /s |
| Reverse Polarity ProtectionyesInterfaceEtherNet/IPTMProtection ClassIIIMechanical DataIIISetting MethodMenu (OLED)Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataMTTFd (EN ISO 13849-1)Web serveryesEtherNet/IPTM001Connection Diagram No.001Control Panel No.50 | Temperature Drift | < 50 <i>µ</i> m/K |
| InterfaceEtherNet/IP™Protection ClassIIIMechanical DataIIISetting MethodMenu (OLED)Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataMTTFd (EN ISO 13849-1)Web serveryesEtherNet/IP™001Connection Diagram No.001Control Panel No.\$001Suitable Connection Equipment No.\$00 | Temperature Range | -2550 °C |
| Protection Class III Mechanical Data III Setting Method Menu (OLED) Housing Material Metal Degree of Protection IP68 Connection M12 × 1; 8-pin, X-cod. Safety-relevant Data M12 × 1; 8-pin, X-cod. MTTFd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IP™ 001 Connection Diagram No. 001 Control Panel No. \$2 Suitable Connection Equipment No. 50 | Reverse Polarity Protection | yes |
| Mechanical Data Setting Method Menu (OLED) Housing Material Metal Degree of Protection IP68 Connection M12 × 1; 8-pin, X-cod. Safety-relevant Data M12 × 1; 8-pin, X-cod. MTTFd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IP™ ● Connection Diagram No. 001 Control Panel No. \$201 Suitable Connection Equipment No. \$50 | Interface | EtherNet/IP™ |
| Setting MethodMenu (OLED)Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataM12 × 1; 8-pin, X-cod.MTTFd (EN ISO 13849-1)350,69 aWeb serveryesEtherNet/IP™001Connection Diagram No.001Control Panel No.X2 T13Suitable Connection Equipment No.50 | Protection Class | III |
| Housing MaterialMetalDegree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataM12 × 1; 8-pin, X-cod.MTTFd (EN ISO 13849-1)350,69 aWeb serveryesEtherNet/IP™●Connection Diagram No.001Control Panel No.X2 T13Suitable Connection Equipment No.50 | Mechanical Data | |
| Degree of ProtectionIP68ConnectionM12 × 1; 8-pin, X-cod.Safety-relevant DataTTFd (EN ISO 13849-1)MTTFd (EN ISO 13849-1)350,69 aWeb serveryesEtherNet/IP™●Connection Diagram No.001Control Panel No.X2 T13Suitable Connection Equipment No.50 | Setting Method | Menu (OLED) |
| Connection M12 × 1; 8-pin, X-cod. Safety-relevant Data M17Fd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IP™ ● Connection Diagram No. 001 Control Panel No. X2 Suitable Connection Equipment No. 50 | Housing Material | Metal |
| Safety-relevant Data MTTFd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IP™ Connection Diagram No. Control Panel No. Suitable Connection Equipment No. 50 | Degree of Protection | IP68 |
| MTTFd (EN ISO 13849-1) 350,69 a Web server yes EtherNet/IP™ ● Connection Diagram No. 001 Control Panel No. X2 Suitable Connection Equipment No. 50 | Connection | M12 × 1; 8-pin, X-cod. |
| Web server yes EtherNet/IP™ ● Connection Diagram No. 001 Control Panel No. X2 T13 Suitable Connection Equipment No. 50 | Safety-relevant Data | |
| EtherNet/IP™ ● Connection Diagram No. 001 Control Panel No. X2 Suitable Connection Equipment No. 50 | MTTFd (EN ISO 13849-1) | 350,69 a |
| Connection Diagram No. 001 Control Panel No. X2 Suitable Connection Equipment No. 50 | Web server | yes |
| Control Panel No. X2 T13 Suitable Connection Equipment No. 50 | EtherNet/IP™ | |
| Suitable Connection Equipment No. 50 | Connection Diagram No. | 001 |
| · · | Control Panel No. | X2 T13 |
| Suitable Mounting Technology No. 380 | Suitable Connection Equipment No. | 50 |
| | Suitable Mounting Technology No. | 380 |

Display brightness may decrease with age. This does not result in any impairment of the sensor function.

These sensors work with a high-resolution CMOS line and DSP technology and determine distance using angular measurement.

Sensors with Industrial Ethernet make the analog and digital input cards at control units unnecessary, as all service and measurement data is read, analyzed and processed in the control unit in real time, without the need for conversion. Power over Ethernet connects data transfer and power supply in one cable and thus reduces the wiring effort.



Complementary Products

Midspan Adapter Z0029 Protective Housing ZNNS001, ZNNS002 Switch/Junction with PoE ZAC50xN0x

IndustrialEthernet









- 22 = UP Button
- 23 = Down Button
- 48 = Network Status
- 60 = Display
- 78 = Module status 85 = Link/Act LED

- 2 = Receiver Diode
- Screw M4 = 1 Nm
- All dimensions in mm (1 mm = 0.03937 Inch)



| Leger | nd | PT | Platinum measuring resistor | ENAR5422 | Encoder A/Ā (TTL) | |
|---------|--------------------------------------------|---------|-------------------------------------------|----------|--------------------------------------|--|
| + | Supply Voltage + | nc | not connected | | Encoder B/B (TTL) | |
| - | Supply Voltage 0 V | U | Test Input | ENA | Encoder A | |
| ~ | Supply Voltage (AC Voltage) | Ū | Test Input inverted | ENв | Encoder B | |
| А | Switching Output (NO) | W | Trigger Input | Amin | Digital output MIN | |
| Ā | Switching Output (NC) | W - | Ground for the Trigger Input | Амах | Digital output MAX | |
| V | Contamination/Error Output (NO) | 0 | Analog Output | Аок | Digital output OK | |
| v | Contamination/Error Output (NC) | 0- | Ground for the Analog Output | SY In | Synchronization In | |
| Е | Input (analog or digital) | BZ | Block Discharge | SY OUT | Synchronization OUT | |
| Т | Teach Input | Awv | Valve Output | OLT | Brightness output | |
| Z | Time Delay (activation) | а | Valve Control Output + | м | Maintenance | |
| S | Shielding | b SY | Valve Control Output 0 V | rsv | reserved | |
| RxD | Interface Receive Path | | Synchronization | Wire Co | Wire Colors according to DIN IEC 757 | |
| TxD | Interface Send Path | SY- | Ground for the Synchronization | BK | Black | |
| RDY | Ready | E+ | Receiver-Line | BN | Brown | |
| GND | Ground | S+ | Emitter-Line | RD | Red | |
| CL | Clock | ÷ | Grounding | OG | Orange | |
| E/A | Output/Input programmable | SnR | Switching Distance Reduction | YE | Yellow | |
| ۲ | IO-Link | Rx+/- | Ethernet Receive Path | GN | Green | |
| PoE | Power over Ethernet | Tx+/- | - Ethernet Send Path | BU | Blue | |
| IN | Safety Input | Bus | Interfaces-Bus A(+)/B(-) | VT | Violet | |
| OSSD | Safety Output | La | Emitted Light disengageable | GY | Grey | |
| Signal | Signal Output | Mag | Magnet activation | WH | White | |
| BI_D+/- | Ethernet Gigabit bidirect. data line (A-D) | RES | Input confirmation | PK | Pink | |
| ENORSA | Encoder 0-pulse 0-0 (TTL) | EDM | Contactor Monitoring | GNYE | Green/Yellow | |

