### Drawings, Free Space

#### Mounting

- **Sensor Arrangement for Holes and Edges**
- **Pin Assignment**
- **Current Voltage**
- **Supply Voltage**
- **Proper Environment**
- **Sensors, Mounting, Dimensions**
- **Warning Labels**
- **Proper Use**

### Measuring Range

- Start of Measuring range: 0 °C...
- End of Measuring range: 50 °C...

### Pin Assignment

- **Pin 1**: +5V
- **Pin 2**: Power supply (11...30 VDC)
- **Pin 3**: Signal
- **Pin 4**: Ground (GND)
- **Pin 5**: System ground supply
- **Pin 6**: Reference potential for analog output

### Current Voltage

- **3 mA**: 262077
- **4 mA**: 98232
- **5 mA**: 163768
- **10 mA**: 131000
- **12 mA**: 131000

### Supply Voltage

- **Nominal value**: 24 V DC (11...30 V, P < 3 W)

### Proper Use

#### The optoNCDT 1750 System

- For use in industrial and laboratory areas.
- Used for measuring displacement, distance and position as well as in in-process quality control and dimension testing.

### Warning Labels

- **Safety Instructions**
  - Avoid unnecessary laser radiation to be exposed to the human body.
  - Switch off the sensor for cleaning and maintenance.

### Protection Against Laser Radiation

- **CAUTION**
  - Do not stare into the laser beam.
  - Sensitive to light.

### Environmental Conditions

- **Ambient temperature**: -4 °C ... +158 °F
- **Humidity**: 5 - 95 % (non-condensing)
- **Storage temperature**: -20 °C ... 70 °C
- **Operating temperature**: 0 °C ... 50 °C
- **Pressure**: Atmospheric pressure
- **Sensor Arrangement**
  - For holes and edges.

### Safety Instructions

- **Pay attention to careful handling during mounting and operation.**
- **Do not exceed torques.**
- **Avoid unnecessary laser radiation.**

### Optical Inputs

- **Exclude from protection class.**
- **Contamination**
  - Impairment or failure of the measuring device.

### Technical Data

- **RS422 - Output**
- **RS422 - Input**
- **Micro-Epsilon Messtechnik**
  - Koenigbacher Str. 15
  - 30 VDC
  - Nominal value: 24 V DC (11...30 V, P < 3 W)
  - www.micro-epsilon.com
  - 94496 Ortenburg

### Laser Class

- **Class 2 Laser Product**
  - Laser beam must be directed perpendicularly onto the surface of the target.

### Supplier Information

- **MICRO-EPSILON MESSTECHNIK AG & CO. KG**
  - Konradshöfer Str. 55-59
  - D-97741 Bad Kissingen
  - Germany

### Limitations

- **Do not stare into the laser beam.**
- **Avoid unnecessary laser radiation.**
- **Avoid damage.**

### Contact Information

- **Micro-Epsilon**
  - Koenigbacher Str. 15
  - 30 VDC
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### Notes

- **Never deliberately look into the laser beam!**
- **Close your eyes or turn away immediately if ever the laser beam should hit your eyes.**

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*Images and diagrams are provided for illustrative purposes only.*
RS422 Connection with USB Converter IF2001/USB
Cross the lines for connections between sensor and PC.
Disconnect or connect the D-sub connection between RS422 and USB converter when the sensor is disconnected from power supply only.

Comissioning
Connect the sensor to a PC/teardown via a RS422 connection. Disconnect or connect the D-sub connection between RS422 and USB converter when the sensor is disconnected from power supply only.

Start the program Sensor Connect vs.x.x.x You will find this program on the provided CD.

Select a Measuring Rate
Start with a medium measuring rate. Select a measuring rate from the list. Confirm with Apply.

Store the Settings
Go to the menu Settings > System settings > Bus > Arduino or on the supplied CD.

Select a Measuring Rate
Go to the menu Settings > data recording > measuring rate.
Start with a medium measuring rate. Select a measuring rate from the list. Confirm with Apply.

Select an interface
Go to the menu Settings > output > output interface.
Defines which interface is used for output of measured values. A parallel output is measured values using multiple channels is not possible. RS422 and analog output cannot be operated simultaneously. While using the web interface, the output is switched off via RS422.

Place target
Position the target (measurement object) as much as possible in the midrange.

Access via Web Interface
Interactive web-pages for programming the sensor now appear in the web browser. The sensor is active and supplied with measurement values. The ongoing measurement can be operated by means of function buttons in the area Measurement chart.

In the top navigation bar other auxiliary functions (settings, measurement chart etc.) are available.

You need a web browser (e.g. Mozilla Firefox or Internet Explorer) on a PC/notebook.
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The State LED on the sensor indicates the position of the target to the sensor.

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The appearance of the websites can change dependent of the functions. Each page contains descriptions of parameters and tips for filling the website.

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