

OCPxxxP0150C

Reflex Sensors with Background Suppression



EtherCAT® 

Operating instructions

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1. Use for Intended Purpose

This wenglor product must be used in accordance with the following functional principle:

High-Performance Distance Sensors

This group brings together the most powerful sensors for distance measurement, which work in reflex mode according to different principles. High performance distance sensors are particularly fast and precise, and demonstrate their high efficiency over large working ranges. They are ideally suited for demanding applications. Even black and shiny objects are reliably detected. Ethernet technology is integrated into selected sensors.

2. Safety Precautions

2.1. Safety Precautions

- This operating instruction is part of the product and must be kept during its entire service life
- Read this operating instruction carefully before using the product
- Installation, start-up and maintenance of this product has only to be carried out by trained personal
- Tampering with or modifying the product is not permissible
- Protect the product against contamination during start-up
- These products are not suited for safety applications

2.2. Laser/LED Warnings



Laser class 1 (EN 60825-1)

Standards and safety instructions must be observed.

2.3. Approvals and IP Protection



RoHS

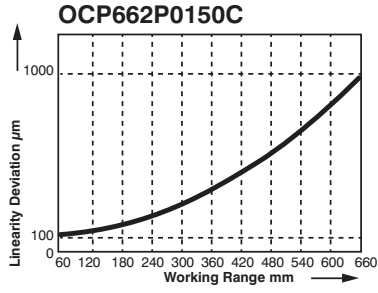
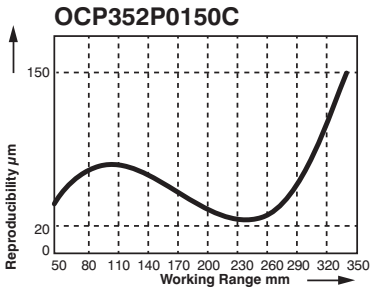
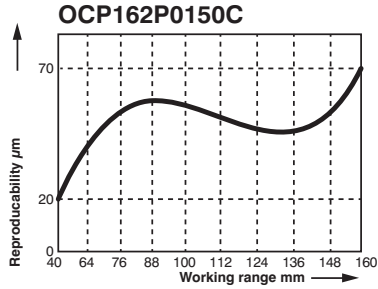
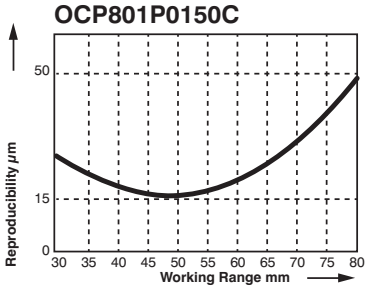
3. Device Features

Order No.	OCP801P0150C	OCP162P0150C	OCP352P0150C	OCP662P0150C
Working Range	30...80 mm	40...160 mm	50...350 mm	60...660 mm
Measuring Range	50 mm	120 mm	300 mm	600 mm
Reproducibility	15...50 μm	20...70 μm	20...150 μm	70...1000 μm
Linearity Deviation	50...100 μm	50...160 μm	100...500 μm	100...1000 μm
Temperature Drift	<5 $\mu\text{m}/\text{K}$	<10 $\mu\text{m}/\text{K}$	<20 $\mu\text{m}/\text{K}$	<50 $\mu\text{m}/\text{K}$
Output Rate	330/s			
Light Source	Laser (red)			
Wave Length	655 nm			
Service Life (T = 25 °C)	100000 h			
Laser Class (EN 60825-1)	1			
max. Ambient Light	10000 Lux			
Beam Divergence	< 2 mrad			
Light Spot Diameter	3.6 × 0.9 mm			
Port Type	100BASE-TX			
PoE Class	1			
Temperature Range	-25...50 °C			
Reverse-polarity Protection	Yes			
Interface	EtherCAT			
Protection Class	III			
Adjustment	Menu (OLED)			
Housing material	Metal			
Protection Class	IP68			
Connection Type	M12×1, 8-pin			
Webserver	Yes			
EoE (Ethernet over EtherCAT)	✓			
Control Panel No.	X2, T15			

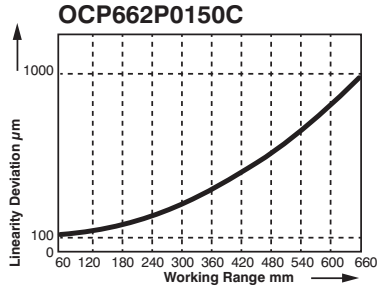
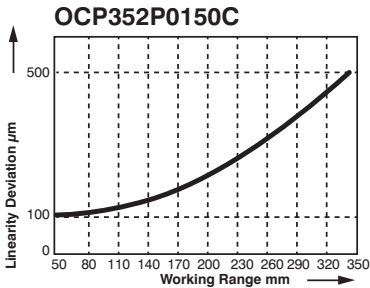
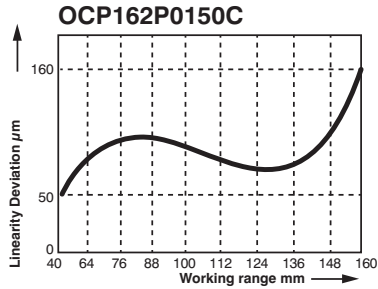
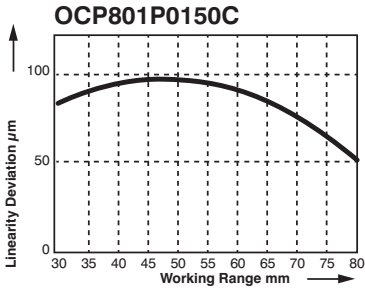
Reference material: kodak white 90 % remission

The warm-up phase lasts approx. 30 minutes. At the beginning of this time, the linearity deviation and reproducibility may vary by a factor of up to 10. During the warm-up phase the values improve in the form of an exponential function until the technical data is reached.

Typical Reproducibility Curves within the Working Range

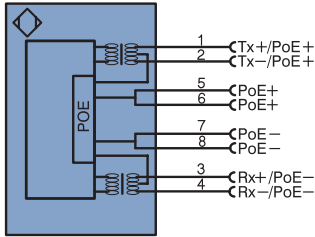


Typical Linearity Error Curves within the Working Range



3.1. Connection Diagram

001



Legend

+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
A	Switching Output (NC)
V	Contamination/Error Output (NO)
∇	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet

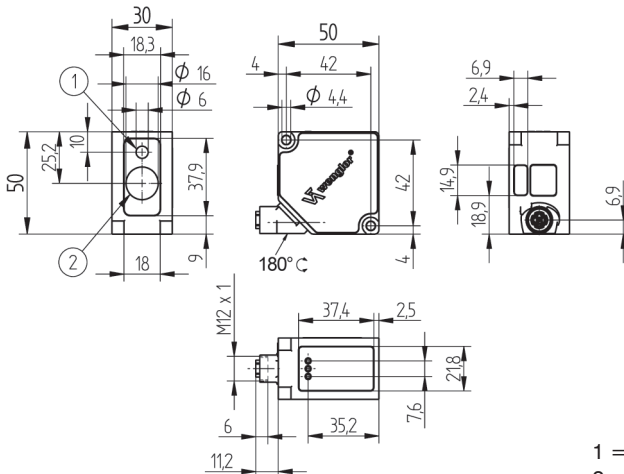
PT	Platinum measuring resistor
nc	not connected
U	Test Input
U	Test Input inverted
W	Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
E+	Receiver-Line
S+	Emitter-Line
≡	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Ba	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable

ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
ADK	Digital output OK
SY In	Synchronization In
SY OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance

Wire Colors according to DIN IEC 757

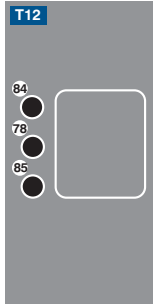
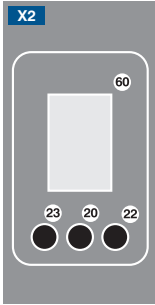
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue

3.2. Housing Dimensions



1 = Transmitter Diode
2 = Receiver Diode

3.3. Control Panel



- 20 = Enter Button
- 22 = Up Button
- 23 = Down Button
- 60 = Display
- 78 = Module Status
- 84 = Communication Status
- 85 = Link/Act LED

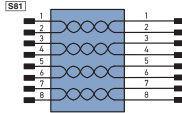
Designation	Condition	Function
Status	Green off	ESM state: Initialisation
	Green flashing	ESM state: PRE - Operational
	Flashing green once	ESM state: SAFE - Operational
	Green on	ESM state: Operational
	Red off	No Error
	Red on	Application controller failure
	Flashing red once	Local Error
	Flashing red twice	Process Data Watchdog Timeout/ EtherCAT Watchdog Timeout
	Red flashing	Red blinking Invalid Configuration
MS (Module Status)	Off	—
	Green	Operate Status
	Red	Device Error
	Red flashing	—
L/A	Off	No Ethernet device has been connected to the port.
	Green	An Ethernet device is connected to the port.
	Green flashing	An Ethernet device is connected to the port and is currently communicating.

3.4. Complementary Products

wenglor offers Connection Technology for field wiring.

Suiting Mounting Technology No. **380**

Suitable Connection Technology No. **50**



Midspace Adapter Z0029

Switch with PoE ZAC50xN0x

4. Mounting Instructions

When using the Sensor, follow the corresponding electrical and mechanical regulations, standards and safety rules. The Sensor must be protected against mechanical influence. The Sensor has optimum extraneous light qualities when the background is within the working range.

5. Initial Operation

5.1. Operation on a controller

If you want to place the device into service at a controller, please complete the following steps:

- Connect the Sensor to a switch with PoE using an appropriate cable M12×1; 8-pole. In the case of a switch without PoE, please use the Midspan Adapter (Z0029) for the appropriate voltage supply. When the voltage supply is present, the display on the Sensor starts.
- You will need the EtherCAT XML Device Description File (ESI-File EtherCAT Slave Information) which is available at www.wenglor.com › Product › Product search (Order number) › Product Description Files or in the download area under Download › Product Description Files › Product search › Order number.
- The files should always be stored in the ESI directory of the respective master. If the Twin-CAT software is used, it should be stored in the folder "...IO\EtherCAT\" in the installation folder.
- The following example shows the steps that have to be carried out (example based on the TwinCat System Manager by Beckhoff):
- First, the list "Echtzeit Ethernet kompatible Geräte" (list of all real-time Ethernet-compatible devices) must be requested.
- Once the correct network card has been installed, new slave devices can be searched for in "E/A Geräte" (I/O devices). If all configurations are correct, the slave devices are now listed in the TwinCAT tree.
- The assemblies can now be switched into "Free Run" mode so that the local cycle runs independently of the pre-set master cycle.
- In the next step, the process data of the individual devices can be configured.

For a more detailed description of the different control systems and the installation of files or the network design, please refer to the help files of the corresponding control system.

5.2. Default Settings

		OCPxxxP0150P
Display	Mode	Process
	Intensity	Screensaver
Filter		1
Resolution		High
Exposure		DCM
Output Rate		Normal
Laser		ON
Password	Activate	Off
	Change	0

6. Functional Overview OLED-Display

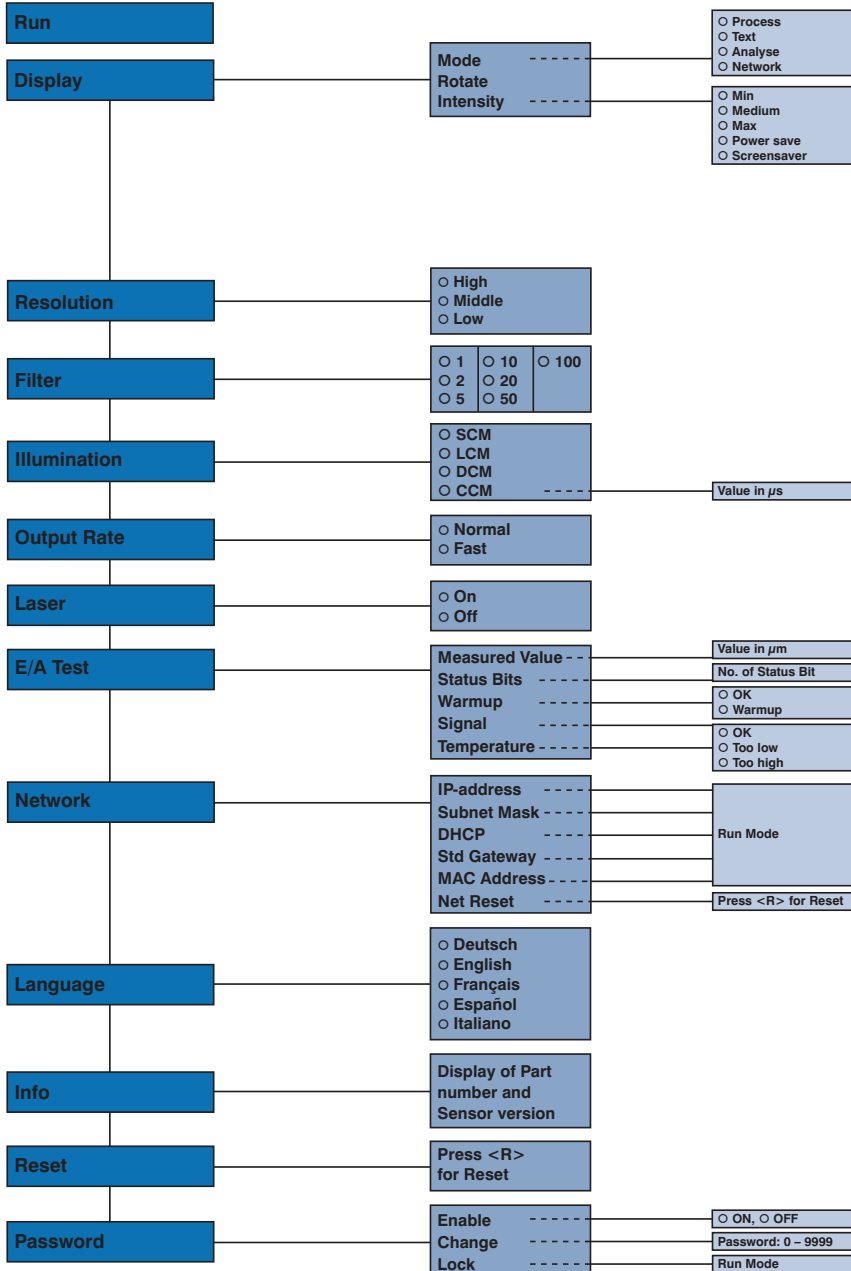




Fig. 1: Set language menu

Navigation by pressing the button:

- ▲ : Navigation up.
- ▼ : Navigation down.
- ↵ : Enter Button.

The selection is confirmed by pressing the Enter button.

Meaning of the menu items:

- ◀ Back : one level higher in the menu.
 - ◀◀ Run : Switch to display mode.
- Change to the configuration menu by pressing any button.

Note: If no setting is made in the configuration menu for a period of 30 s, the Sensor returns automatically to the display view.

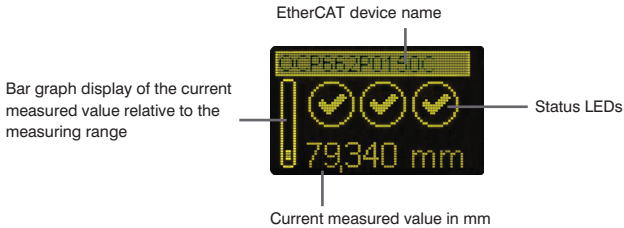
Pressing the button again returns the Sensor to the last menu view used. If a setting is made, it becomes active once you leave the configuration menu.

Important: To prevent any damage to the buttons, please do not use any pointed objects for setting.









The following explains the functions behind the individual menu items.

6.1. Run

The Sensor switches into display mode.



Symbol descriptions of status LEDs:

Symbol	Significance	State 1	State 2	State 3
Symbol 1	Warm-up	 ok	 wait	–
Symbol 2	Signal Strength	 ok	 too low (dirty)	 too high
Symbol 3	Temperature	 ok	 too high	 too low

6.2. Display

Display	Adjust the display device
Mode	Mode: Select display mode (see chapter 6.2.1)
Rotate	Rotate: Rotate display by 180°. By pressing the “←” button the display is rotated by 180°. The rotation is canceled by pressing this button again.
Intensity	Intensity: Set the display intensity (see chapter 6.2.2)
◀ Back	
◀◀ Run	

6.2.1. Display Mode

The measured value in mm and the order number always appear at the sensor’s display. Selection can be made amongst the following additional displays using the “Display Mode” menu option:

Mode	Adjust the display device
<input type="radio"/> Process	Process: Display of status LEDs for warm-up, signal strength and temperature.
<input type="radio"/> Text	Text: Display of a free text that can be sent to the Sensor via the control.
<input type="radio"/> Analysis	Analysis: Display of signal strength in percent and measuring rate in 1/s.
<input type="radio"/> Network	Network: Display of the EtherCAT LEDs MS, CS and L/A. For the function of these LEDs, see “3.3. Control Panel” on page 8.

6.2.2. Display Intensity

Intensity	Set the display intensity
<input type="radio"/> Min	Min: The intensity of the display is set to a minimum value.
<input type="radio"/> Normal	Normal: The intensity of the display is set to a medium value.
<input type="radio"/> Max	Max: The intensity of the display is set to a maximum value.
<input type="radio"/> Power save	Power save: The display switches off after one minute without a button being pressed and automatically switches back on when a button is pressed.
<input type="radio"/> Screensaver	Screensaver: The colors of the display are inverted every minute.

6.3. Resolution

The number of pixels used by the CMOS line is defined by the resolution. The higher the resolution set, the smaller the detectable movements of an object and the slower the output rate of the Sensor becomes when there is a change in the measured values.

Resolution	Adjust the display device
<input type="radio"/> High	High: High resolution, low output rate
<input type="radio"/> Medium	Medium: Medium resolution, medium output rate.
<input type="radio"/> Low	Low: Low resolution, high output rate.
◀ Back	
◀◀ Run	

6.4. Filter

The filter (filter size) is the number of measured values over which the Sensor takes an average. The larger the filter selected, the slower the response time of the Sensor becomes when there is a change in the measured values. A larger filter improves the reproducibility of the Sensor.

Filter	Number of values for averaging
<input type="radio"/> 1	If 1 is selected, each measured value is output directly without averaging. Whenever a value greater than 1 is selected, the Sensor takes an average over the selected number of x measured values.
<input type="radio"/> 2	
<input type="radio"/> 5	
<input type="radio"/> 10	
<input type="radio"/> 20	
<input type="radio"/> 50	
<input type="radio"/> 100	
◀ Back	
◀◀ Run	

6.5. Exposure

The Sensor adjusts its exposure time or light pulse duration automatically up to a maximum value on the object to be detected. In the default DCM (Default Capture Mode), the Sensor has a fixed maximum possible exposure time. In the case of black or shiny objects, for example, it can be helpful to lengthen this time. It can be helpful to reduce the exposure time when the Sensor is aimed at the light source. In the case of problematic applications, it can be influenced by different modes or manually.

Exposure	Adjusting Exposure Times
<ul style="list-style-type: none"> ○ SCM ○ LCM ○ DCM ○ CCM ◀ Back ◀◀ Run 	<p>SCM (Short Capture Mode): The Sensor exposure time can be shortened on dark or glossy objects (e.g. black varnish) in order to reduce a fall in the measuring rate.</p> <p>LCM (Long Capture Mode): The Sensor exposure time can be lengthened on dark or glossy objects (e.g. black varnish) in order to achieve a more accurate measurement.</p> <p>DCM (Default Capture Mode): Default exposure time for standard applications.</p> <p>CCM (Custom Capture Mode): The Sensor exposure time can be adjusted manually between 100...2000 μs.</p>

6.6. Output Rate

The output rate indicates how often the measured value is refreshed per second at the output.

Output Rate	Adjust Output Rate
<ul style="list-style-type: none"> ○ Normal ○ Fast ◀ Back ◀◀ Run 	<p>Normal: The normal output rate is 100/s. This means that a new measured value is read out every 10 ms.</p> <p>Fast : The fast output rate is 330/s. This means that a new measured value is read out every 3 ms.</p> <p>Note: If this mode is activated, the OLED display is switched off as soon as a EtherCAT controller goes online. It's switch back on automatically when the controller goes offline again.</p>

6.7. Laser


In the menu item "Laser", the emitted light can be switched on or off.

Laser	Switch transmitted light on or off
<ul style="list-style-type: none"> ○ On ○ Off ◀ Back ◀◀ Run 	<p>ON: Switch transmitted light on</p> <p>OFF: Switch transmitted light off; the Sensor no longer supplies measured values</p>

6.8. I/O Test

This function manually changes the output of the Sensor. As a result, it is possible to test whether the further process is working as desired. The test is automatically terminated once you leave the test menu. This occurs automatically after no keys have been activated for a period of 10 minutes.

I/O Test	Test of the Sensor outputs
Measured value Statusbits Warm-up Signal Strength Temperature ◀ Back ⬅ Run	Measured value: Default of a measured value in μm Statusbits: The number of the status bit to be set can be selected by pressing the “+” or “-” button. (see list of Statusbits) Warm-up: Default of the warm-up on “ok” or “warm-up” Signal strength: Default of the signal strength on “ok”, “too low” or “too high” Temperature: Default of the temperature on “ok”, “too low” or “too high”

If the Sensor returns to the display view after 30 seconds without pressing the button while the test is still active, this is indicated by a  in the display view.

List of status bits:

Number	Function	Description of when the bit is set	Measured value read-out
1	General error	One of the following bits is set.	—
2	Distance to object too small	The current measured value is below the working range.	Measuring range lower limit
3	Distance to object too large	The current measured value is above the working range.	Measuring range upper limit
4	No signal	The sensor does not detect an object within its working range.	Measuring range upper limit
5	Signal too weak	Too little light is reflected back to the sensor from the object (e.g. very dark surface). The quality of the measured value is reduced as a result.	Current measured value
6	Signal too strong	Too much light is reflected back to the sensor from the object (e.g. reflector) The quality of the measured value is reduced as a result.	Current measured value
7	Warm-up procedure	The sensor is currently in the warm-up phase and the quality of the measured value does not yet comply with the specified technical data. See page 5 below.	Current measured value
8	Temperature too high	The sensor is at the upper limit of its temperature range. If temperature continues to rise, the sensor may be destroyed.	Current measured value
9	Temperature too low	The sensor is at the lower limit of its temperature range. If temperature continues to drop, the sensor may be destroyed.	Current measured value

6.9. Network

Network	Settings of the Network Parameters
IP-Address	IP-Address: Display of the set IP-Address
Subnet Mask	Subnet Mask: Display of the set Subnet Mask
DHCP	DHCP: Display DHCP ON or DHCP OFF
Std Gateway	Std Gateway: Display of the set standard gateway
MAC Address	MAC Address: Display of the default MAC Address
Net Reset	Net Reset: Reset network settings to the default settings
◀ Back	
◀◀ Run	

6.10. Language

The menu language can be changed in the menu item "Language". The user is automatically prompted for his desired language at initial operation and after each reset.

Language	Set menu language
○ Deutsch	
○ English	
○ Francais	
○ Espanol	
○ Italiano	
◀ Back	
◀◀ Run	

6.11. Info

In the menu item "Info" the following information about the Sensor is displayed:

Info	
Order number	
Software version	
Serial number	

6.12. Reset

All Sensor settings, with the exception of the network settings, can be reset to the default settings in the menu item "Reset. The settings of the default settings can be found in Chapter "5.2. Default Settings" on page 10.

Reset	Reset to the default settings
Press <R> for Reset	The Sensor settings that have been made can be reset to the default settings by pressing the "R" button.

6.13. Password

Password protection prevents against changing the set data unintentionally.

Password	Set password functionality
Activate Change Block ◀ Back ◀◀ Run	<p>Enable: Turn password protection on or off. If password protection is activated, the operation of the Sensor is disabled after supply power has been interrupted and is only enabled after successfully entering password.</p> <p>Change: Change password.</p> <p>Lock: Locking Sensor causes an immediate disabling of operation if activate Password is set to "on".</p>

If the password functionality is activated, the password must be entered before each operation of the Sensor. After correctly entering the password by means of the "+" and "-" button, the menu is activated and the Sensor is operational.

- The password functionality is deactivated in the default settings.
- The value range of the password number ranges from 0000...9999

It is necessary to note the newly defined code before changing the password. A forgotten password can only be overwritten by a general password. The general password can be requested by sending an e-mail to support@wenglor.com.

7. Information on EtherCAT

You can find the ESI file for download at www.wenglor.com → **Products** → **Product search** (order number).

Index	Sub index	Name	Data Type	Access right	PDO mapped	Default Settings	Value range	Description
1000h	00h	Device type	Unsigned 32	Ro	No	00000191h		
1008h	00h	Device name	STRING	Ro	No	0CPxxxP0150C		12 character
1009h	00h	Hardware version	STRING	Ro	No	V1.0.0		6 character
100Ah	00h	Software version	STRING	Ro	No	V1.0.5		6 character
Store parameters								
1010h	00h	Highest subindex supported	Unsigned 8	Ro	No	1		1
	01h	Store all parameters	Unsigned 32	Rw	No	0		65766173h = store any other = don't store
Restore default parameters								
1011h	00h	Highest subindex supported	Unsigned 8	Ro	No	1		1
	01h	Restore all parameters	Unsigned 32	Rw	No	0		64616F6Ch = restore any other = don't rest.
Identity Object								
1018h	00h	Highest subindex supported	Unsigned 8	Ro	No	4		4
	01h	Vendor ID	Unsigned 32	Ro	No	0000059Bh		
	02h	Product code	Unsigned 32	Ro	No	02011D0xh		OCP662P0150C OCP352P0150C OCP162P0150C OCP801P0150C
	03h	Revision number	Unsigned 32	Ro	No	01000500h		
	04h	Serial number	Unsigned 32	Ro	No	nnnnnnnh		
10F8h		Local time stamp	Unsigned 64	Ro	Optional			
RxPDO								
1600h	00h	Highest subindex supported	Unsigned 8	W in PreOp, R in Op		0		0 ...7 objects
TxPDO								
1A00h	00h	Highest subindex supported	Unsigned 8	W in PreOp, R in Op		2		2 ...4 objects
	01h	SubIndex 001	Unsigned 32	W in PreOp, R in Op		21300020h		
	02h	SubIndex 002	Unsigned 32	W in PreOp, R in Op		24270010h		
1C00h		Sync manager type						

1C12h	RxPDO assign							
	00h	Highest subindex supported	Unsigned 8	W in PreOp, R in Op	No	1		0 ... 1
	01h	SubIndex 001	Unsigned 16	W in PreOp, R in Op	No	1600h		
1C13h	TxPDO assign							
	00h	Highest subindex supported	Unsigned 8	W in PreOp, R in Op	No	1		1
	01h	Subindex 001	Unsigned 16	W in PreOp, R in Op	No	1A00h		
1C32h		SM output parameter						
1C33h		SM input parameter						
2040h	Device Access							
	00h	Highest subindex supported	Unsigned 8	Ro	No	2	0 – 254	2
	01h	Webserver Access	BOOL	Rw	No	0: Enabled	0 – 1	0: Enabled 1: Disabled
	02h	Key disabling	BOOL	Rw	No	0: Enabled	0 – 1	0: Enabled 1: Disabled
2100h	Display settings							
	00h	Highest subindex supported	Unsigned 8	Ro	No	5	0 – 254	5
	01h	Display mode	Unsigned 8	Rw	No	0: Process	0 – 3	0: Process 1: Analysis 2: Text 3: Network
	02h	Rotate display	BOOL	Rw	No	0: Not rotated	0 – 1	0: Not rotated 1: Rotated
	03h	Display intensity	Unsigned 8	Rw	No	4: Screensaver	0 – 4	0: Minimum 1: Normal 2: Maximum 3: Energy saving mode 4: Screensaver
	04h	Display language	Unsigned 8	Rw	No	1: English	0 – 4	0: Deutsch 1: English 2: Français 3: Español 4: Italiano
	05h	Display text	STRING	Rw	Optional	-		Displayable text 18 characters

2110h		Measured value settings						
	00h	Highest subindex supported	Unsigned 8	Ro	No	6	0 – 254	6
	01h	Laser ON-OFF	Unsigned 8	Rw	Optional	0: Laser ON	0 – 1	0: Laser On 1: Laser Off
	02h	Output rate	Unsigned 8	Rw	Optional	0: normal	0 – 1	0: Normal 1: Fast
	03h	Filter value	Unsigned 8	Rw	Optional	0: Filter size 1	0 – 6	0: Filter size 1 1: Filter size 2 2: Filter size 5 3: Filter size 10 4: Filter size 20 5: Filter size 50 6: Filter size 100
	04h	Resolution	Unsigned 8	Rw	Optional	0: High resolution	0 – 2	0: High resolution 1: Medium resolution 2: Low resolution
	05h	Exposure mode	Unsigned 8	Rw	Optional	2: DCM mode	0 – 3	0: SCM mode 1: LCM mode 2: DCM mode 3: CCM mode
	06h	Exposure time	Unsigned 16	Rw	Optional	1000µs	100 – 8000	Max. exposure time 100 ... 8000 µs
2130h	00h	Measured value	Unsigned 32	Ro	Yes			Distance value
2427h	00h	Status	Unsigned 16	Ro	Yes			1: General 2: Object distance too small 3: Object distance too great 4: No signal 5: Contamination 6: Signal too high 7: Warm-up procedure 8: Over-temperature 9: Under-temperature
8000h	00h	Measured value timestamp	Unsigned 64	Ro	Optional			FFFFFFFFFFFFFFFh
2990h		InternalObj2						
	00h	Highest subindex supported	Unsigned 8	Rw	No	2	0 – 254	
	01h	Subldx1	Unsigned 8	Ro	No			Internal use
	02h	Subldx2	ARRAY	Rw	No			Internal use
6131h		Physical unit						
	00h	Highest subindex supported	Unsigned 8	Ro	No	1	0 – 254	
	01h	AI Instance 1	Unsigned 32	Ro	No	FD010000h		

8. Web-based configuration

The Device is equipped with a web-based set-up interface which operates independent of the operating system. Parameterizing of the Device can conveniently be done using a standard web browser. The web server allows control-independent monitoring or creation of a test environment. The web server allows control-independent monitoring or a test environment to be set up. It is not needed for normal operation on the controller.

NOTE!

Communication via EoE (Ethernet over EtherCAT) is required in order to be able to access the integrated webserver's website. This is only possible via the mailbox communication of a PLC or a PC-based controller software such as TwinCAT®. All website settings can be made, if the product is in Pre-OP mode. For information on how to configure the network parameters please refer to the instructions "Start-Up-EtherCAT-Device" (www.wenglor.com → **Download** → **Operating Instructions** → **Product Search (Order Number)** → **General instructions**) in the chapter "Displaying and working with the integrated web server".

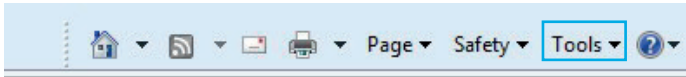
All further steps require an active mailbox and network communication.

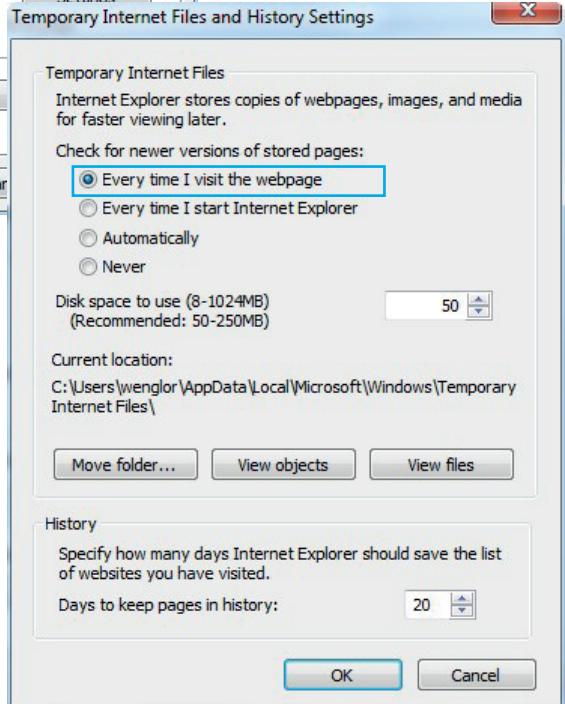
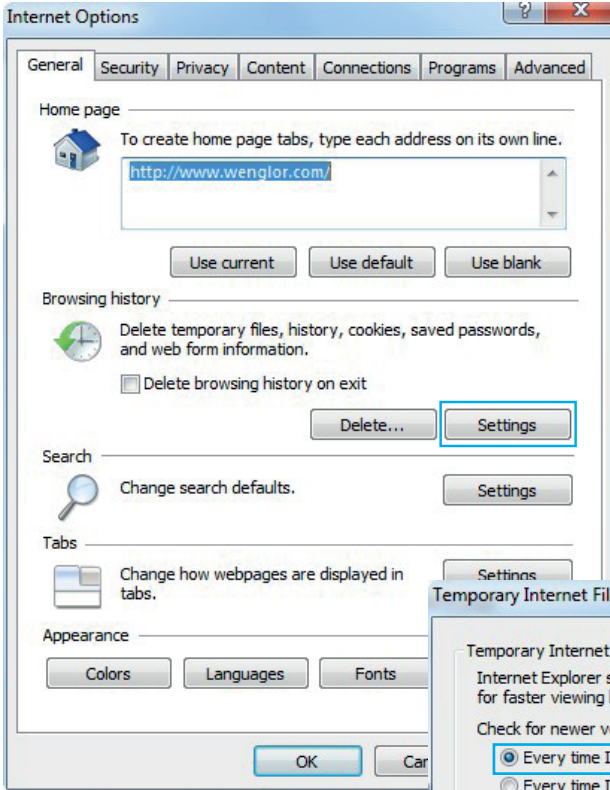
When operated with a controller, settings which have been changed via the website are overwritten by the controller or changes are only possible in the pre-op mode.



Call up the Administration Interface

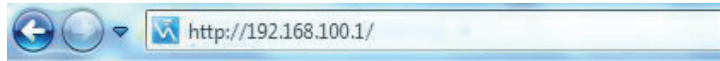
Launch a web browser. Enter the preset IP address of the Device in the address bar of your browser and press enter. To ensure that the browser displays the current website settings, the website in question must always be refreshed automatically in case of change. This setting must be changed browser-specific and is demonstrated here by means of Internet Explorer as an example. Under **Extras** → **Internet Options** → **Browsing history** → **Settings** the selection should be set to **Every time I visit the webpage**. Otherwise, any changes to the homepage might be displayed incorrectly.





In order to now be able to open the website of the Device (in the example ZAC50CN01), the IP address must be entered in the address bar of the browser as described

Example: 192.168.100.1 (IP address set, for example, via TwinCAT® in the area EoE of the Device)



The overview page **Device General** is not password-protected. If the pages of the device or port settings are accessed, a password prompt appears.

The following user data are preset in the delivery state:

User name: admin

Password: admin

The password can be changed on the page **Device Settings**.

Note:

Permanent storage of the password only via object 1010h (store parameters) in the controller.

8.1. Page layout

- General device
- Device settings
- Measured value settings
- Device test

③

General device



④

Part Number	OCP662P0150C
Product version	V1.0.7
Producer	wenglor sensoric GmbH
Description	OCP: Reflex Sensor with Background Suppression
Serial number	500013947
Real-time Ethernet status	online
Device type	0x00000191

OCP662P0150C



78.83 mm

②

The website is divided into the following 4 areas:

- 1. Language selection:** The website can be changed from English (default setting) to German, French, Spanish or Italian via the language selection.
- 2. Display:** On each page, the current display is represented exactly like on the device itself.
- 3. Category selection:** The web-based settings are divided into four categories:
 - **Device general:** Overview page with general information about the device
 - **Device settings:** Network and display settings of the device
 - **Measured value settings:** Settings for influencing the measured value of the device
 - **Device Test:** Manual change of the Sensor output in order to test the process
- 4. Page content:** Depending on which category is selected, the relevant page content is displayed.

8.2. Device general



Sensors for your success

English

- General device
- Device settings
- Measured value settings
- Device test

General device



Part Number	OCP662P0150C
Product version	V1.0.7
Producer	wenglor sensoric GmbH
Description	OCP: Reflex Sensor with Background Suppression
Serial number	500013947
Real-time Ethernet status	online
Device type	0x00000191

OCP662P0150C

✓ ✓ ✓

78.83 mm

After establishing the connection, the overview page “Device general” is displayed.

8.3. Device Settings



Sensors for your success

English

<ul style="list-style-type: none"> General device Device settings Measured value settings Device test 	<p>Device settings</p> <p>Network Settings</p> <p>IP-address <input type="text" value="192.168.100.10"/></p> <p>Subnet mask <input type="text" value="255.255.255.0"/></p> <p>Standard gateway <input type="text" value="0.0.0.0"/></p> <p>Display settings</p> <p>Language <input type="text" value="English"/></p> <p>Rotate display <input type="text" value="OFF"/></p> <p>Display intensity <input type="text" value="Screensaver"/></p> <p>Display mode <input type="text" value="Process"/></p> <p>Password <input type="button" value="Change"/></p>	<p>OCP662P0150C</p> <p>✓ ✓ ✓</p> <p>78.84 mm</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------

Network Settings

Display of network settings

Display Settings

For functional description of display settings see chapter “6.2. Display” on page 13.

Change password:

Password	<input type="button" value="Change"/>
----------	---------------------------------------

An additional window opens, in which the new password can be entered.

Note: If the password is forgotten, it's only possible to return the device to its default settings by means of a reset at the controller.

8.4. Measured Value Settings



Sensors for your success

English

- » General device
- » Device settings
- » **Measured value settings**
- » Device test

Measured value settings

Set resolution	High	▼
Filter	1	▼
Lighting mode	DCM	▼
Illumination	1000	Apply
Emitted light	ON	▼
Reset sensor settings	Reset	

OCP662P0150C

✓ ✓ ✓

78.83 mm

Resolution

For functional description of resolution see chapter “6.3. Resolution” on page 14.

Filter

For functional description of filter see chapter “6.4. Filter” on page 14.

Exposure

For functional description of exposure see chapter “6.5. Exposure” on page 15.

Emitted Light

For functional description of transmitted light see chapter “6.7. Laser” on page 15.

Sensor Settings Reset

In the event of a reset, the display settings are returned to their default values.


Note: Measured value settings are not reset in this case!

8.5. Device Test



Sensors for your success

English

<ul style="list-style-type: none"> › General device › Device settings › Measured value settings › Device test 	Device test	OCP662P0150C															
<p>Simulation of</p> <table border="1"> <tr> <td>Measured Value</td> <td>100000 μm</td> <td>Apply</td> </tr> <tr> <td>Warmup</td> <td>Off</td> <td></td> </tr> <tr> <td>Signal</td> <td>Too low</td> <td></td> </tr> <tr> <td>Temperature</td> <td>Off</td> <td></td> </tr> <tr> <td>Test mode</td> <td colspan="2" style="text-align: center;">Switch off</td> </tr> </table> <p>Remaining test mode time 9.55 min</p>		Measured Value	100000 μm	Apply	Warmup	Off		Signal	Too low		Temperature	Off		Test mode	Switch off		 <p>100.00 mm</p> <p>Remaining test mode time 9.55 min</p>
Measured Value	100000 μm	Apply															
Warmup	Off																
Signal	Too low																
Temperature	Off																
Test mode	Switch off																

For functional description of device test see chapter “6.8. I/O Test” on page 16.

The test is activated as soon as at least one parameter is changed.

The length of the test is limited to 10 minutes. Afterwards, the test is terminated automatically. The remaining time of the test is displayed under the button “Switch off” and below the display window. The test can also be terminated prematurely by clicking on “Switch off”.

Note: Settings are retained in the online state as well.

9. Maintenance Instructions

- This wenglor Sensor is maintenance-free.
- It is recommended to clean the lens and the display regularly and to check the socket connections.
- Do not use any solvents or cleaning agents to clean the Sensor, which could damage the device.

10. Proper Disposal

wenglor sensoric GmbH does not take back unusable or irreparable products. When disposing of the products, the relevant national regulations for waste disposal apply.

11. EU Declaration of Conformity

The EU declaration of conformity can be found on our website at www.wenglor.com in download area.