

Operating instructions
Photoelectric distance sensor

OMH550 OMH552 OMH554

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1 Preliminary note

You will find instructions, technical data, approvals and further information using the QR code on the unit / packaging or at documentation.ifm.com.

1.1 Symbols used

- √ Requirement
- Instructions
- [...] Designation of keys, buttons or indications
- → Cross-reference
- Important note
- Non-compliance may result in malfunction or interference.
- Information
 Supplementary note

1.2 Warnings used

ATTENTION

Warning of damage to property



CAUTION

Warning of personal injury

Slight reversible injuries may result.

2 Safety instructions

- The unit described is a subcomponent for integration into a system.
 - The system architect is responsible for the safety of the system.
 - The system architect undertakes to perform a risk assessment and to create documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the architect of the system.
- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ → Intended use).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- · Protect units and cables against damage.



CAUTION

Exposure to radiation

- Use of controls or adjustments or procedures other than those specified herein may result in hazardous radiation exposure.
- Only use the operating and adjusting devices indicated in the operating instructions.

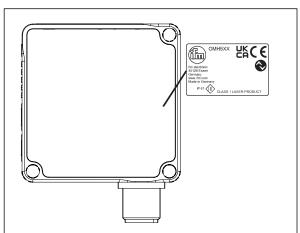


CAUTION

Visible laser light; LASER CLASS 1.

EN/IEC 60825-1 : 2007 and EN/IEC 60825-1 : 2014 complies with 21 CFR Part 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007.

Position of the product label



Warning sign

LASER KLASSE 1 CLASS 1 LASER PRODUCT APPAREIL Á LASER CLASSE 1

3 Intended use

The device is used as a photoelectric distance sensor.

The device continuously detects the distance to the object and generates output signals according to the parameter settings.

• 2 switching outputs are available. They can be set separately. Switch points can either be set or taught.

The device uses a laser diode as light source and creates a light spot. This makes it possible to detect small objects.



The light spot should hit the object or the background. Intermediate states may lead to faulty measured values.

4 Function

4.1 Output function hysteresis

The hysteresis keeps the switching state of the output stable if the measured value varies about the sensing range. Both outputs (OUT1 and OUT2) can be set as hysteresis function.



OUT2 can only be configured via IO-Link.

4.2 Output function window

The window function enables the monitoring of a defined acceptable range. Both outputs (OUT1 and OUT2) can be set as window function.



OUT2 can only be configured via IO-Link.

4.3 Switching off the laser

The laser can be switched off via the input on pin 5 and via IO-Link.

Input signal on pin 5	Lacor		
PNP	NPN	Laser	
Low / not used	High / not used	On	
High	Low	Off	

4.4 Operating modes

4.4.1 Switching mode

In switching mode, the sensor is directly connected to the process control unit and transmits the state via the switching output.

4.4.2 IO-Link

IO-Link is a communication system for connecting intelligent sensors and actuators to automation systems. IO-Link is standardised in the IEC 61131-9 standard.



General information on IO-Link at io-link.ifm



Input Output Device Description (IODD) with all parameters, process data and detailed descriptions of the device at documentation.ifm.com

IO-Link offers the following advantages:

- · Interference-free transmission of all data and process values
- · Parameter setting in the running process or presetting outside the application
- · Parameters for identifying the connected devices in the system
- · Additional parameters and diagnostic functions
- Automatic backup and restore of parameter sets in case of device replacement (data storage)

- Logging of parameter sets, process values and events
- · Device description file (IODD Input Output Device Description) for easy project planning
- Standardised electrical connection
- Remote maintenance

5 Installation

5.1 Installation conditions

▶ Install the device so that the object to be detected is within the sensor's detection zone.



Reflecting objects in the direct beam path of the sensor – also outside the detection zone – are to be avoided by the customer (tilt the sensor by 10°). Otherwise the measured values can be ambiguous.

Detection zone → Data sheet

5.2 Mounting accessories

The device is supplied without mounting accessories.

Suitable mounting accessories can be found at www.ifm.com.

5.3 Installation instructions

5.3.1 Avoidance of soiling and ambient light

Preferably align photoelectric sensors with the front lens facing downwards or parallel to the earth's surface.

Background:

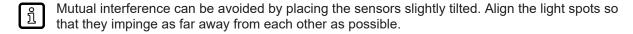
- Photoelectric sensors are sensitive to direct radiation of light sources. Everyday light sources (lamps, sun) radiate from above.
- Photoelectric sensors react sensitively to soiling, as it reduces the excess gain.
- Dust deposits can be reduced by downwards or sideways orientation. This allows for longer cleaning intervals.
- Make sure that sensors installed with their front lens facing upwards are not oriented towards roof windows or ceiling lamps.

5.3.2 Avoidance of mutual interference

Photoelectric sensors should be installed with a sufficient distance between each other. This particularly applies if the detection range of the two sensors partly intersects.

The reason for this is:

• Both sensors have a detection range. This means that the laser light spot of a sensor can be received by its neighbouring sensor. This may lead to the falsification of the measured values and result in incorrect switching.

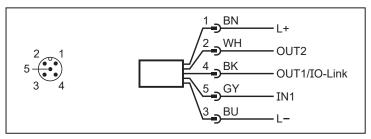


5.3.3 Sensor alignment for a moving object

The sensor has to be installed in a way to ensure that the object is moved into the detection zone of the sensor from the side or from the front.

6 Electrical connection

- The device must be connected by a qualified electrician.
 - ▶ Observe the national and international regulations for the installation of electrical equipment.
 - ► Ensure voltage supply according to SELV, PELV. OMHxxx: cULus, Supply Class 2
- Disconnect power.
- ► Connect the device as follows:

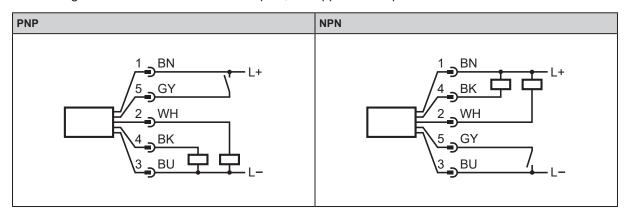


- 1: L+
- 2: OUT2: switching output
- 3: L
- 4: OUT1: switching output or IO-Link
- 5: IN1: laser on / off

6.1 PNP/NPN selection

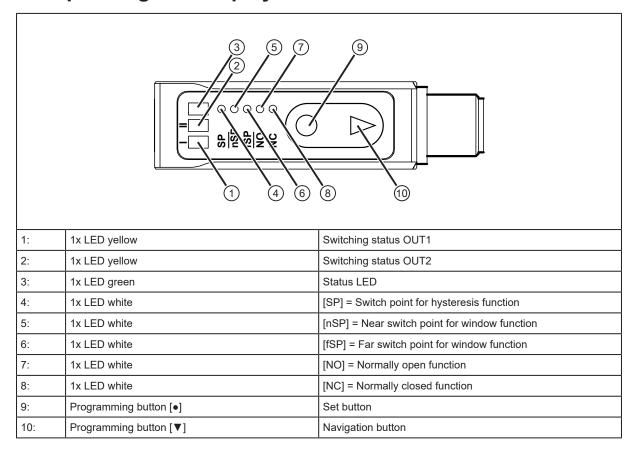
Pins 2 and 4 can be switched between PNP and NPN logic.

The setting cannot be made for individual pins, but applies to all pins.



- 1: L+
- 2: OUT2: switching output
- 3: L
- 4: OUT1: switching output or IO-Link
- 5: IN1: laser on / off

7 Operating and display elements



7.1 LED states

LED behaviour					
OUT 1	Status LED	OUT 2	- Description	Action	
			Status LED is green	Device is connected to the voltage supply and ready for operation	
			Status LED is green, OUT 1 is yellow	Device OK, switching output OUT 1 active	
			Status LED is green, OUT 2 is yellow	Device OK, switching output OUT 2 active	
**	**		Status LED flashing red (1Hz), OUT 1 flashing yellow (4 Hz)	Short circuit OUT 1 Troubleshooting (→ □ 24)	
	**	₩	Status LED flashing red (1Hz), OUT 2 flashing yellow (4 Hz)	Short circuit OUT 2 Troubleshooting (→ □ 24)	
	***		Status LED flashing red (1 Hz)	Error (correctable by the operator) Troubleshooting (→ □ 24)	
			Status LED is red	Serious error ► Contact ifm support. Contact at www.ifm.com	
**		Ĭ.	Status LED is green, OUT1 and OUT2 (8 Hz) flashing	[Find me] Function	

7.2 LED states of the parameters

LED behaviour			Description	Action	
SP	nSP/fSP	NO/NC	Description	Action	
			All LEDs are off	The device is in the Run mode.	
			[SP] and [NO]/[NC] are white	Device is in Info mode. Hysteresis function is activated. Sensor operates as normally open or normally closed.	
			[nSP]/[fSP] and [NO]/[NC] are white	Device is in Info mode. Window function is activated. Sensor operates as normally open or normally closed.	

8 Set-up



The sensor needs a warm-up period of \geq 20 min. The performance parameters specified in the data sheet only apply after this warm-up period.

After power on, the device is put into operation. After approx. 3 s the device is ready for operation.

On delivery, the parameters are set to the factory setting $(\rightarrow$ Factory setting $(\rightarrow$ 26).

The device can also be configured using suitable IO-Link parameter setting software.

9 Parameter setting

The sensor can be configured via the [●] and [▼] buttons as well as using IO-Link.

Internally, the device remains in the operating mode during parameter setting. It continues its monitoring function with the existing parameters until the change has been completed.

!

The output logic (PNP/NPN) and the switching output [OUT2] can only be set via IO-Link. On delivery, the output logic PNP is set.

The selection of the control signal with which the laser is switched off is also made via IO-Link.

9.1 Hysteresis function

The selected switch point [SP] is the set point. The reset point is automatically set behind the selected switch point [SP] by the sensor. The nominal distance between set point and reset point is the hysteresis, which can be set via IO-Link.

9.1.1 Parameter setting of the switch point via the device buttons

- ▶ Press the button [•] to exit the Run mode.
- ▶ Position the object.
- ▶ Press and hold the [•] button for 2 seconds to teach [SP].
- > Sensor returns to the Run mode.

9.1.2 Parameter setting of the switch point via IO-Link

Single point mode (\rightarrow \square 21)

- ► Call up [Parameters] > [SSC1.1 / SSC1.2].
- ► Select [SSC1.1 Config. Mode / SSC1.2 Config. Mode].
- ► Set [Single point].
- ▶ Select [SSC1.1 Param. SP1 / SSC1.2 Param. SP1].
- ► Enter [SP1] in mm.



The switch point can also be taught via teach commands (system commands).

- ► Call up [Parameters] > [Teach].
- ► Select [TI Select].
- ▶ Select [SSC1.1] or [SSC1.2]. (Depending on which output is to be taught.)
- Select the corresponding system commands and carry out the teaching process by clicking on the buttons.

9.1.3 Hysteresis function via IO-Link

The hysteresis keeps the switching state of the output stable if the measured value varies about the sensing range. The selected switch point [SP] is the set point. The reset point is automatically set behind the selected switch point [SP] by the sensor. The hysteresis is the nominal distance between the set and reset points.

The hysteresis can be set via IO-Link.

► Call up [Parameters] > [SSC1.1 / SSC1.2].

- ► Select [SSC1.1 Config. Hyst / SSC1.2 Config. Hyst].
- ► Enter the hysteresis in mm.

9.2 Window function

It is possible to define a window for the object recognition for each of the two outputs (OUT1 / OUT2).

The switch points for the window can be set independently of each other and in any order. To teach a clearly defined window, both switch points must always be taught.

If [nSP] > [fSP] has been taught, the device will automatically invert the values.

The condition nSP = fSP (in IO-Link SP1 = SP2) is not permitted. A minimum distance must be entered.

OMH550: minimum distance 2 mm OMH552: minimum distance 7 mm OMH554: minimum distance 10 mm

9.2.1 Parameter setting via the device buttons

- ▶ Press the button [•] to exit the Run mode.
- Use [▼] to navigate to [nSP] (near switch point) or [fSP] (far switch point).
- Position the object.
- ▶ Press and hold the [•] button for 2 seconds to teach [nSP] / [fSP].
- □ LED for [nSP] / [fSP] flashes twice (50 Hz).
- > Sensor returns to the Run mode.

9.2.2 Parameter setting via IO-Link

Window mode (\rightarrow \square 22)

- ► Call up [Parameters] > [SSC1.1 / SSC1.2].
- ► Select [SSC1.1 Config. Mode / SSC1.2 Config. Mode].
- ► Set [Window].
- ▶ Select [SSC1.1 Param. SP1 / SSC1.2 Param. SP1].
- ► Enter [SP1] in mm.
- ▶ Select [SSC1.1 Param. SP2 / SSC1.2 Param. SP2].
- ► Enter [SP2] in mm.
 - The window can also be taught via teach commands (system commands).
 - ► Call up [Parameters] > [Teach].
 - ► Select [TI Select].
 - ▶ Select [SSC1.1] or [SSC1.2]. (Depending on which output is to be taught.)
 - Select the corresponding system commands and carry out the teaching process by clicking on the buttons.

9.3 Two-point function (Two point mode)

It is possible to define a switching area for the object recognition for each of the two outputs (OUT1 / OUT2). There is no hysteresis.

The function can only be set via IO-Link.

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The switching points for the two-point function (Two point mode) can be set independently of each other. Both switching points always have to be set.

9.3.1 Parameter setting via IO-Link

Two point mode (\rightarrow \square 23)

- ► Select [Parameter] > [SSC1.1 / SSC1.2].
- ► Select [SSC1.1 Config. Mode / SSC1.2 Config. Mode].
- Set [Two point].
- ► Select [SSC1.1 Param. SP1 / SSC1.2 Param. SP1].
- ► Enter [SP1] in mm.
- ► Select [SSC1.1 Param. SP2 / SSC1.2 Param. SP2].
- ► Enter [SP2] in mm.
- ñ

The switching area can also be taught via teach commands (system commands).

- ► Call up [Parameters] > [Teach].
- ► Select [TI Select].
- ▶ Select [SSC1.1] or [SSC1.2]. (Depending on which output is to be taught.)
- ▶ Select the corresponding system commands and carry out the teaching process by clicking on the buttons.

9.4 Activating OUT2

9.4.1 Parameter setting via IO-Link

- ► Call up [Parameters] > [Output configuration].
- ► Select [ou2].
- ➤ Set [SSC1.2].

9.5 Output logic (PNP/NPN)

Set the switching logic for all inputs and outputs.

9.5.1 Parameter setting via IO-Link

- ► Call up [Parameters] > [Basic settings].
- ► Select [P-n].
- ► Set [PnP] (positive switching) or [nPn] (negative switching).

9.6 Output function

9.6.1 Parameter setting via the device buttons

- ▶ Press the button [•] to exit the Run mode.
- ▶ Use [▼] to navigate to [NO] (normally open) or [NC] (normally closed).
- ▶ Press and hold [•] for 2 seconds to set [NO] / [NC].
- > Sensor returns to the Run mode.

9.6.2 Parameter setting via IO-Link

- ► Call up [Parameters] > [SSC1.1] (OUT1) / [SSC1.2] (OUT2).
- ▶ Select [SSC1.1 Config. Logic] (OUT1) / [SSC1.2 Config. Logic] (OUT2).
- ▶ Set [High active] (normally open) or [Low active] (normally closed).

9.7 Lock / unlock the device

9.7.1 Parameter setting via the device buttons

Locking:

- Press and hold [●] and [▼] simultaneously for 10 seconds.
- After 10 seconds, the green status LED flashes twice (50 Hz).
- > The sensor is locked and returns to the Run mode.

Unlocking:

- Press and hold [●] and [▼] simultaneously for 10 seconds.
- After 10 seconds, the green status LED flashes twice (50 Hz).
- > The sensor is unlocked and returns to the Run mode.
- Indication of device locking:
 - ▶ Press [•] or [▼].
 - □ Green status LED goes out for 0.5 seconds.
 - > The device changes to Run mode and the green status LED is again lit permanently.

9.7.2 Parameter setting via IO-Link

- ► Call up [Parameters] > [Display settings].
- ► Select [Loc].
- ► Set [Loc] for locking and [uLoc] for unlocking.



Indication of device locking:

- ▶ Press [•] or [▼].
- > The device changes to Run mode and the green status LED is again lit permanently.

9.8 Indication of current setting (Info mode)

- Press [▼] to change to the Info mode.
- ▷ LEDs are on for 2 seconds depending on the setting at [NO] / [NC] and at [SP] or [nSP] / [fSP] to indicate whether the hysteresis or window function is set.
- > Sensor returns to the Run mode.

9.9 Reset to factory setting

9.9.1 Reset via device buttons

- ▶ Disconnect the voltage supply.
- ▶ Press and hold [▼] and restore the voltage supply.
- ▶ Release [▼] press [•].
- □ Green status LED flashes twice confirming reset to factory setting.

9.9.2 Reset via IO-Link

- ► Call up [Parameters] > [Basic settings].
- ► Click on the system command [Reset application] or [Back-to-box].
- > The device is reset according to the selected reset method.

The two system commands reset the device in a different way.

[Reset application]: The parameters of the technology-specific application are set to default values. The identification parameters remain unchanged. An upload to the data memory of the master is carried out, if activated in the port configuration of the master.

[Back-to-box]: The parameters of the device are set to the factory settings and communication is blocked until the next time the device is switched off and on. Note: Disconnect the device directly from the master port!

9.10 Additional parameter settings via IO-Link

9.10.1 Switch-on delay

A switch-on delay can be set for both switching outputs (0...10s).

- ► Call up [Parameters] > [SSC1.1 / SSC1.2].
- ► Select [SSC1.1 / SSC1.2 Switch-on delay].
- ► Enter a switch-on delay between 0...10s.
- To set a switch-on delay for [SSC1.2], this output must first be activated.

9.10.2 Switch-off delay

A switch-off delay can be set for both switching outputs (0...10s).

- ► Call up [Parameters] > [SSC1.1 / SSC1.2].
- ► Select [SSC1.1 / SSC1.2 Switch-off delay].
- ► Enter a switch-off delay between 0...10s.
- To set a switch-off delay for [SSC1.2], this output must first be activated.

9.10.3 Filter

Setting the filter property in relation to the detection speed.

4 options can be selected.

- [HIGH] (Slow detection, precision)
- [MEdi] (Standard)
- [LOW] (Average detection, filtering of individual interference pulses)
- [OFF] (Fast detection, without filtering)
- ► Call up [Parameters] > [Signal].
- ► Select [FILT].
- ▶ Set one of the options.

9.10.4 Transmitter configuration

Setting to activate and deactivate the transmitter.

4 options can be selected.

- [OFF / Off] (permanently off)
- [ON / On] (permanently on)
- [On ExtActive / Switch on with external signal active] (via input IN1 at pin 5)
- [PDOut / Controlled by PDOut] (via IO-Link communication PDOut)
- ► Select [Parameter] > [Signal].
- ► Select [Transmitte configuration].
- Set one of the options.
 - The operating state of the device can be changed with the help of control data via IO-Link (PDOut).

In case of a communication interruption (COMLOST), the device remains in the last operating state set by valid control data (PDOut).

9.10.5 Switching counter

Counts the number of detected objects.

- ► Call up [Parameters] > [Digital Output 1 / Digital Output 2].
- ► Select [SSC1.1 counter / SSC1.2 counter].
- ► Read the counter value.

- !
- The counter can be reset via the system command [Reset counter to zero].

The command resets all counters.

- ► Call up [Parameters] > [Counter configuration].
- ▶ Click on the system command [Reset counter to zero].
- ▷ All counters (switching counters and memory Lo / Hi) are reset.

9.10.6 Operating modes

Setting the evaluation speed.

3 options can be selected:

- [Standard]
- [Power]
- [Speed]
- ► Call up [Parameters] > [Basic settings].
- ► Select [ModE].
- ▶ Set one of the options.

Operating mode	Speed	Object colour (black)	
[Standard]	++	++	
[Power]	+	+++	
[Speed]	+++	+	



The table provides a preliminary assessment of different applications and the respective operating modes. The rating scale ranges from "+" (less suitable) to "+++" (very suitable).

10 Setting

10.1 Setting the range via IO-Link

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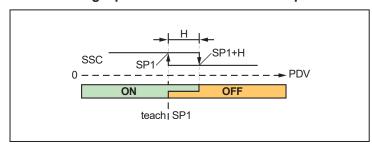
With "Switchpoint Logic = 1", "ON" and "OFF" can be seen reversed in the graphics.

10.1.1 Single point mode

SSC active: PDV ≥ SP1

SSC inactive: PDV ≤ SP1 + H

10.1.1.1 Single point mode to smart sensor profile

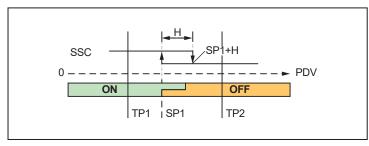


Normally open:

SP1 SP1 + H (switch point logic = 0) Switch-on point

Switch-off point

10.1.1.2 Single point mode to smart sensor profile - Two value teach



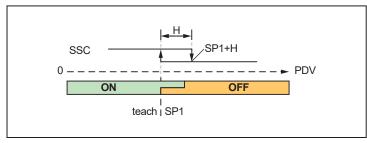
Normally open:

SP1 = √TP1*TP2

SP1 + H

(switch point logic = 0) Switch-on point Switch-off point

10.1.1.3 Single-point mode - position



Normally open:

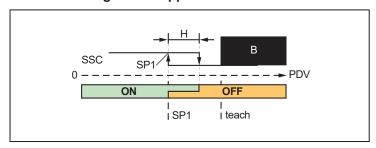
SP1

SP2 + H

(Switch point logic = 0) Switch-on point

Switch-off point

10.1.1.4 Background suppression

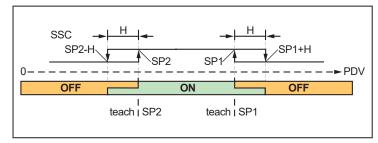


Normally open:(switch point logic = 0)SP1 = teach -2*HSwitch-on pointSP1 + HSwitch-off point

SP: Switch point
H: Hysteresis
TP: Teach point

B: Background suppression
SSC: SwitchingSignalChannel
PDV: ProcessDataVariable

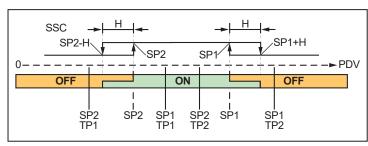
10.1.2 Window mode



Normally open: (switch point logic = 0)
SP1 Switch-on point
SP1 + H Switch-off point

SP2 Switch-off point window SP2 + H Switch-on point window

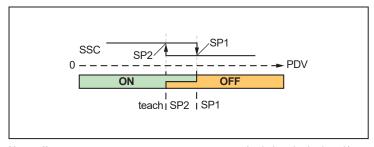
10.1.2.1 Window Mode - Two value teach



Normally open:(Switch point logic = 0) $SP1 = \sqrt{TP1*TP2}$ Switch-on pointSP1 + HSwitch-off point

 $SP2 = \sqrt{TP1*TP2}$ Switch-off point window SP2 + H Switch-on point window

10.1.3 Two point mode



Normally open:(switch point logic = 0)SP1Switch-off pointSP2Switch-on point

SP: Switch point
H: Hysteresis
TP: Teach point

SSC: SwitchingSignalChannel PDV: ProcessDataVariable

11 Troubleshooting

Possible cause	Solution
Short-circuit at switching output OUT1 / OUT2	► Check the wiring
Ambient temperature too high	▶ Reduce ambient temperature
Supply voltage outside the specification (→ technical data sheet)	► Adjust supply voltage

If the device behaves unexpectedly or incorrectly:

- ▶ Disconnect the device from the voltage supply (restart)
- ▶ Restore factory settings, i.e. delivery status (via IO-Link)

If the problems persist:

► Contact the ifm support at www.ifm.com.

12 Maintenance, repair and disposal

Faulty sensors must only be repaired by the manufacturer.

- ► Keep the front lens of the sensor clean.
- ▶ After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.
- ▶ Do not open the module housing. There are no user-serviceable components inside.

13 Factory setting

IO-Link parameter	Parameter function	Setting range	Factory setting	Own setting
[P-n]	Output polarity	[PNP] [NPN]	PNP	
[Mode]	Operating mode	[Standard] [Power] [Speed]	Standard	
[SSC1.1 Param Sp1]	Setpoint 1	(3000 8000) * 0.01 (OMH550) (5000 20000) * 0.01 (OMH552) (500 5000) * 0.1 (OMH554)	8000 (OMH550) 20000 (OMH552) 5000 (OMH554)	
[SSC1.1 Param Sp2]	Setpoint 2	(3000 8000) * 0.01 (OMH550) (5000 20000) * 0.01 (OMH552) (500 5000) * 0.1 (OMH554)	3000 (OMH550) 5000 (OMH552) 500 (OMH554)	
[SSC1.1 Config Logic]	Switching output logic	0: [High active] 1: [Low active]	0	
[SSC1.1 Config Mode]	Switch point operating modes	0: [Deactivated] 1: [Single Point] 2: [Window] 3: [Two Point]	1	
[SSC1.1 Config Hyst]	Hysteresis	(10500) * 0.01 (OMH550) (10500) * 0.01 (OMH552) (10500) * 0.1 (OMH554)	20 (OMH550) 20 (OMH552) 20 (OMH554)	
[SSC1.2 Param Sp1]	Setpoint 1	(3000 8000) * 0.01 (OMH550) (5000 20000) * 0.01 (OMH552) (500 5000) * 0.1 (OMH554)	8000 (OMH550) 20000 (OMH552) 5000 (OMH554)	
[SSC1.2 Param Sp2]	Setpoint 2	(3000 8000) * 0.01 (OMH550) (5000 20000) * 0.01 (OMH552) (500 5000) * 0.1 (OMH554)	3000 (OMH550) 5000 (OMH552) 500 (OMH554)	
[SSC1.2 Config Logic]	Switching output logic	0: [High active] 1: [Low active]	0	
[SSC1.2 Config Mode]	Switch point operating modes	0: [Deactivated] 1: [Single Point] 2: [Window] 3: [Two Point]	1	
[SSC1.2 Config Hyst]	Hysteresis	(10500) * 0.01 (OMH550) (10500) * 0.01 (OMH552) (10500) * 0.1 (OMH554)	20 (OMH550) 20 (OMH552) 20 (OMH554)	
[SSC1.1 Switch-on de- lay]	Switch-on delay	(0 10000) * 0.001	0	
[SSC1.1 Switch-off de- lay]	Switch-off delay	(0 10000) * 0.001	0	

IO-Link parameter	Parameter function	Setting range	Factory setting	Own setting
[SSC1.2 Switch-on de- lay]	Switch-on delay	(0 10000) * 0.001	0	
[SSC1.2 Switch-off de- lay]	Switch-off delay	(0 10000) * 0.001	0	
[FILT]	Measured value filtering	0: [OFF] 1: [LOW] 2: [Medi] 3: [HIGH]	2	
[Loc]	Locking the ext. operation	0: [Loc] 1: [uLoc]	1	
[ou2]	Output configuration	16: [OFF] 33: [SSC2]	16	
[Transmitter configuration]	Control of the transmitter deactivation	0: [Off] 1: [On] 3: [On_ExtActive] 4: [PDOut]	4	