

Diffuse sensor with background suppression

HT46CI/LP-M12



IO-Link interface

Sensors in the HT46C.../L... variant have a dual-channel architecture. The IO-Link interface is available in accordance with specification 1.1.2 (July 2013) on pin 4 (OUT 1). You can easily, quickly and economically configure the devices via the IO-Link interface. Furthermore, the sensor transmits the process data via the IO-Link interface and makes diagnostic information available through it.

Parallel to the IO-Link communication, the sensor can output the continuous switching signal for object detection on OUT 2. The IO-Link communication does not interrupt this signal.

NOTICE



In the *Sensor Studio* configuration software, the following applies with regard to the designations: Q1 = OUT 1, Q2 = OUT 2.

The sensors offer no data retention and no ISDU support. The device can only be identified via VendorID and DeviceID.

IO-Link identification

VendorID dec/hex	DeviceID dec/hex	Device
338/0x152	2124/0x00084C	HT46CI/LP-M12

IO-Link process data

Device output data

Data bit	Assignment	Meaning
0	Switching output Q1 (OUT 1)	0 = inactive, 1 = active
1	Warning output autoControl	0 = no warning, 1 = warning
2	Sensor operation	0 = off, 1 = on Sensor operation off when detection is not possible (e.g. during the teach event).
3	Not assigned	Free
4	Not assigned	Free
5	Not assigned	Free
6	Not assigned	Free
7	Not assigned	Free

Device input data

Data bit	Assignment	Meaning
0	Deactivation	0 = transmitter active, 1 = transmitter inactive
1	Not assigned	Free
2	Not assigned	Free
3	Not assigned	Free
4	Not assigned	Free
5	Not assigned	Free
6	Not assigned	Free
7	Not assigned	Free

Device-specific IODD

At www.leuze.com in the download area for IO-Link sensors you will find the IODD zip file with all data required for the installation.

IO-Link parameters documentation

The complete description of the IO-Link parameters can be found in the *.html files. Double-click on a language variant:

- German: *IODD*-de.html
- English: *IODD*-en.html

Functions configurable via IO-Link

PC configuration and visualization is performed comfortably with the USB-IO-Link Master SET US2-IL1.1 (part no. 50121098) and the *Sensor Studio* configuration software (in the download area of the sensor at www.leuze.com).

Function block	Function	Description
Configuration	Logical function of Q2	If the function Q2 = <i>switching output</i> is selected, the switching function corresponds to the current setting which was selected via the L/D changeover. If Q2 = <i>inv. switching output</i> is selected, the switching behavior of the output is inverted. If Q2 = <i>warning output</i> is selected, the warning output is activated.
	L/D switching	In the factory setting, outputs Q1 and Q2 are antivalent switching outputs: – Light switching: Q1 = light switching, Q2 = dark switching. – Dark switching: Q1 = dark switching, Q2 = light switching.
	Function selection of the switching delay	Activation of a suitable switching delay is possible. It is not possible to combine switching delays.
	Time base of the switching delay	Possibility of selecting a time base.
	Factor for the time base of the switching delay	To adapt the time base, it is multiplied by the entered factor. Only whole-number factors from 1 to 15 are permitted.
Commands	Light switching	
	Dark switching	
	Switching delay	<i>On</i> activates the internal time function. <i>Off</i> deactivates the internal time function.
	Switch the process data display mode to analog value	Activate to display diagrams on the <i>Process</i> tab when using <i>Sensor Studio</i> configuration software.