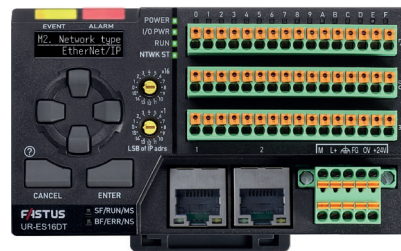


OPTEX FA PORTFOLIO





IO-Link Master

16-Channel Multifunctional IO-Link Master

IO-Link

High-speed counter

DI/O

UR Series



UR-ES16DT



EtherCAT

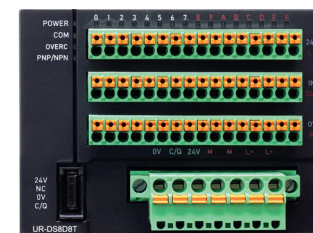
EtherNet/IP

CC-Link IE Field Basic

UR-MS16DT

CC-Link IE TSN

CC-Link IE Field



IO-Link Hub

Compact IO-Link Hub

UR-DS Series



UR-DS16D	16 x DI
UR-DS16T	16 x DO
UR-DS8D8T	8 x DI, 8 x DO
UR-DS4AD	4 x AI
UR-DS4DA	4 x AO
UR-DS8RTD	8 x RTD Input
UR-DS16TC*1	16 x Thermocouple Input
UR-DS4TC*1	4 x Thermocouple Input



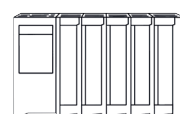
CC-Link IE TSN

CC-Link IE Field

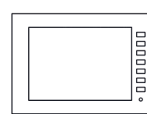
CC-Link IE Field Basic

Modbus TCP

PLC



HMI



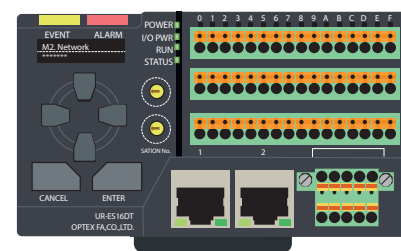
Engineering



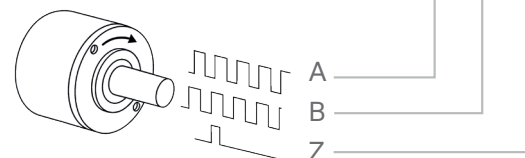
Gateway



IO-Link Master | UR Series



Incremental Encoder
• Open Collector 24 VDC

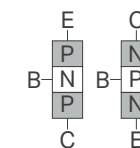
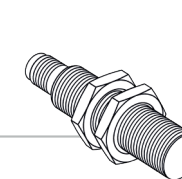


IO-Link

Up to 20 m

IO-Link

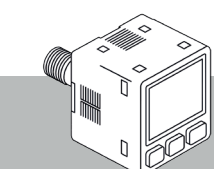
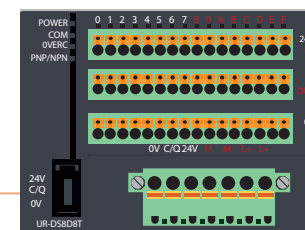
Up to 20 m



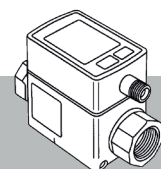
Digital I/O devices
• Source PNP
• Sink NPN

IO-Link Hub | UR-DS Series

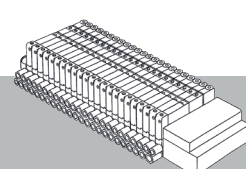
• Digital I/O
• Analog I/O
• Temperature Input



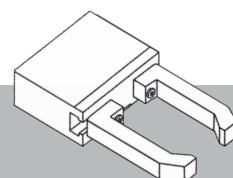
Pressure Sensor



Flow Sensor



Solenoid Valve



Electric Gripper



Non-Contact Thermometer
TI-S Series



Displacement Sensor
CD2H Series



Distance Setting Sensor
TOF-DL Series



Fiber-Optic Sensor
D4RF Series

*1. Coming soon (As of October 2025)





Laser Displacement Sensors

CDX Series

Ultra high-accuracy

14 ... 190 mm

Laser

Ethernet

DI

Model	Range		Accuracy	Linearity	
	Diffuse	Specular		Diffuse	Specular
CDX-L15A	-	15 ±1 mm	0.25 µm	-	±0.05 % of F.S.
CDX-LW15A	-	15 ±1 mm		-	±0.05 % of F.S.
CDX-30A	30 ±5 mm	25.5 ±3 mm		±0.03 % of F.S.	±0.04 % of F.S.
CDX-W30A	30 ±5 mm	25.5 ±3 mm		±0.015 % of F.S.	±0.04 % of F.S.
CDX-85A	85 ±20 mm	81.5 ±10 mm		±0.03 % of F.S.	±0.03 % of F.S.
CDX-W85A	85 ±20 mm	81.5 ±10 mm		±0.015 % of F.S.	±0.03 % of F.S.
CDX-150A	150 ±40 mm	-	0.25 µm	±0.04 % of F.S.	-
CDX-W150A	150 ±40 mm	-		±0.015 % of F.S.	-



Laser Displacement Sensors

CD2H Series

High-speed and high-accuracy

25 ... 1,200 mm

Laser

IO-Link/Modbus RTU

DI/O

Model	Range	Accuracy	Linearity
CD2H-30*****A	30 ±5 mm	0.25 µm	- 25 ... 35 mm
CD2H-50*****A	50 ±10 mm		- 40 ... 60 mm
CD2H-130*****	130 ±70 mm	4 µm	±0.1 % of F.S. 60 ... 200 mm
CD2H-245*****	245 ±175 mm	10 µm	70 ... 420 mm
CD2H-350*****	350 ±250 mm	20 µm	100 ... 600 mm
CD2H-700*****	700 ±500 mm	100 µm	±0.3 % of F.S. 200 ... 1,200 mm



Laser Displacement Sensors

CD2S Series

Compact and all-in-one

25 ... 160 mm

*Coming soon

Laser

IO-Link

DI/O

Model	Range	Accuracy	Linearity
CD2S-30***	30 ±5 mm	2 µm	- 25 ... 35 mm
CD2S-50***	50 ±15 mm	5 µm	±0.1 % of F.S. 35 ... 65 mm
CD2S-110***	110 ±50 mm	20 µm	60 ... 160 mm



Laser Displacement Sensors

CD22 Series

Compact with 7-segment display

10 ... 150 mm

Laser

RS-485 / AO

DI/O

Model	Range	Accuracy	Linearity
CD22-15*****	15 ±5 mm	1 µm	- 10 ... 20 mm
CD22-35*****	35 ±15 mm	6 µm	±0.1 % of F.S. 20 ... 50 mm
CD22-100*****	100 ±50 mm	20 µm	50 ... 150 mm



Through-beam Edge Laser Sensors

TD1 Series

Edge position measurement

Laser

RS-485

Model	Range	Accuracy	Linearity
TD1-010M8	Edge: ±5 mm, Width: 10 mm	±4 µm	±0.4 % of F.S.

Range	Model
250 ... 2,500 mm	TOF-DL250GC
250 ... 2,500 mm	TOF-DL250A***
250 ... 2,500 mm	TOF-DL250T***
0 ... 4,500 mm	TOF-L450D****



Distance Setting

Time-of-Flight Sensors

TOF-DL/TOF-L Series

Ultra-compact and long-distance detection

0 ... 4,500 mm

Laser

Diffuse

IO-Link/AO

DI/O

0 ... 20,000 mm	TOF-3V2000**
300 ... 3,000 mm	TOF-3V300**
300 ... 3,000 mm	TOF-3V300**1



Distance Setting

Time-of-Flight Sensors

TOF-3V Series

Long-distance detection

0 ... 20,000 mm

Laser

Diffuse /Retro-Reflective

DI/O

20 ... 50 mm	BGS-HDL05T***
20 ... 50 mm	BGS-HL05T*
50 ... 250 mm	BGS-HDL25T****
50 ... 250 mm	BGS-HL25T**
20 ... 50 mm	BGS-HLM05T*
50 ... 250 mm	BGS-HLM25T**



Distance Setting

Background Suppression Sensors

BGS-HL/BGS-HDL Series

High resolution

20 ... 250 mm

Laser

Triangulation

DI/O

20 ... 100 mm	BGS-ZL10**
50 ... 300 mm	BGS-ZL30**



Distance Setting

Background Suppression Sensors

BGS-ZL Series

Laser type (Class 1)

20 ... 300 mm

Laser

Triangulation

DI/O

30 ... 300 m	BGS-CP30**
30 ... 300 mm	BGS-CM30**



Distance Setting

Background Suppression Sensors

BGS-C Series

M18 cylindrical design

30 ... 300 mm

Red LED

Triangulation

DO

20 ... 80 mm	Z4B-S08***
20 ... 100 mm	Z4B-10***
50 ... 300 mm	Z4B-30***



Distance Setting

Background Suppression Sensors

Z4B Series

High-power with a small spot beam

20 ... 300 mm

Red LED

Triangulation

IO-Link

DO

20 ... 100 mm	BGS-Z10**
20 ... 150 mm	BGS-Z15**
50 ... 300 mm	BGS-Z30**
20 ... 100 mm	BGS-ZM10***
50 ... 300 mm	BGS-ZM30***



Distance Setting

Background Suppression Sensors

BGS-Z/ BGS-ZM Series

High-power narrow beam

20 ... 300 mm

Red LED

Triangulation

DO

Range	Model
0 ... 400 mm	ZD-L40**
200 ... 10,000 mm	ZR-L1000**
0 ... 30,000 mm	ZT-L3000**



Photoelectric Sensors

Amplifier built-in type

Laser Through-Beam/Retro-Reflective/Diffuse DI/O

Z-L Series

0 ... 30,000 mm

0 ... 2,000 mm	DSTA-200***
0 ... 2,000 mm	DSTC-200***
0 ... 8,000 mm	DSR-800
100 ... 50,000 mm	DSR-5000
0 ... 1,000 mm	DSD-100



Photoelectric Sensors

Amplifier separate type

Laser Through-Beam/Retro-Reflective/Diffuse AO DO

DS Series

0 ... 50,000 mm

0 ... 25,000 mm	CTD-2500*-R
... 25,000 mm	CTD-2500*-IR
10 ... 4,000 mm	CRD-400*-R
0 ... 110 mm	CDD-11*-R
0 ... 110 mm	CDD-11*-IR
0 ... 400 mm	CDD-40*-IR
0 ... 1,000 mm	CDD-100*-R
0 ... 1,000 mm	CDD-100*-IR



Photoelectric Sensors

Long-distance detection and M18 cylindrical design

Red/Infrared LED Through-Beam/Retro-Reflective/Diffuse DO

C-R Series

0 ... 25,000 mm

0 ... 20,000 mm	C2T*-*2000**
10 ... 4,000 mm	C2R*-*F400**
10 ... 3,500 mm	C2R*-*350**
0 ... 110 mm	C2D*-*11**
0 ... 400 mm	C2D*-*40**
0 ... 800 mm	C2D*-*80**



Photoelectric Sensors

100+ variations and M18 cylindrical design

Red/Infrared LED Through-Beam/Retro-Reflective/Diffuse DO

C2 Series

0 ... 20,000 mm

0 ... 25,000 mm	Z4T-2500***
10 ... 4,000 mm	Z4R-400***
10 ... 90 mm	Z4D-L09***
0 ... 1,000 mm	Z4D-100***



Photoelectric Sensors

Compact IO-Link type

Red LED Through-Beam/Retro-Reflective/Diffuse IO-Link DO

Z4 Series

0 ... 25,000 mm

0 ... 70,000 mm	V4T-7000*/V3T-7000**
10 ... 12,000 mm	V4R-1200*/V3R-1200**
10 ... 2,000 mm	V4D-200*/V3D-200**



Photoelectric Sensors

Models available in universal voltage (VAC/VDC)

Red LED Through-Beam/Retro-Reflective/Diffuse DO

V3/V4 Series

0 ... 70,000 mm

0 ... 500 mm	ET-500**
3 ... 8 mm	EL-08**
2 ... 15 mm	EL-15**
5 ... 30 mm	EL-30**
0 ... 100 mm	ED-100**
0 ... 500 mm	ET-S500**
2 ... 15 mm	EL-S15**
0 ... 30 mm	ED-S30**



Photoelectric Sensors

Ultra-thin type for flexible mounting

Red LED Through-Beam/Diffuse DO

E Series

0 ... 500 mm

0 ... 1,500 mm	DR-Q150T**
1,000 ... 4,000 mm	DR-Q400T**



Transparent-Object Detection

Photoelectric Sensors

Easy to set up and finely adjustable laser

Laser Retro-Reflective DI/O

DR-Q Series

0 ... 4,000 mm

Range	Model
0 ... 2,000 mm	ZR-QX200***



Transparent-Object Detection

Photoelectric Sensors

ZR-QX Series

Coaxial type

0 ... 2,000 mm

Red LED

Retro-Reflective

DO

10 ... 500 mm	KR-Q50***
10 ... 1,500 mm	KR-Q150***
10 ... 2,500 mm	KR-Q300***



Transparent-Object Detection

Photoelectric Sensors

KR-Q Series

Stable detection at short distances

10 ... 2,500 mm

Red LED

Retro-Reflective

DO

16 ... 20 mm	DM-18T*
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Color/Mark Detection

Photoelectric Sensors

DM Series

3-color light source switching (Red/Green/Blue)

16 ... 20 mm

RGB LED

Diffuse

DI/O

D4RF-T***
D4IF-T**



Fiber-Optic Sensors

D4RF/D4IF Series

Ultra-fast response time - 16 µs

Red/Infrared LED

IO-Link

DI/O

AO

D12R-T***



Fiber-Optic Sensors

D12R Series

Simple and standalone

*Coming soon

Red LED

DI/O

-40 ... 500 °C	TI-S30
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Non-Contact Thermometers

TI-S Series

High-accuracy and compact design with laser ring pointer

-40 ... 500 °C

Thermopile

IO-Link

DI/O

AO

0 ... 200 °C	SA-80T-2A
0 ... 400 °C	SA-80T-4A
0 ... 400 °C	SA-80T-4IO



Non-Contact Thermometers

SA-80 Series

M18 cylindrical design

0 ... 400 °C

Thermopile

IO-Link/AO

-40 ... 500 °C	CS-30TAC
-40 ... 500 °C	CS-40TAC
0 ... 1,000 °C	CS-30TAC-HT
0 ... 1,000 °C	CS-40TAC-HT



Non-Contact Thermometers

CS Series

High-temperature operating capability in a compact design

-40 ... 1,000 °C

Thermopile

DI/O

AO

Headquarters

OPTEX FA CO., LTD.
91 Chudoji-Awata-cho
Shimogyo-ku
Kyoto 600-8815
JAPAN