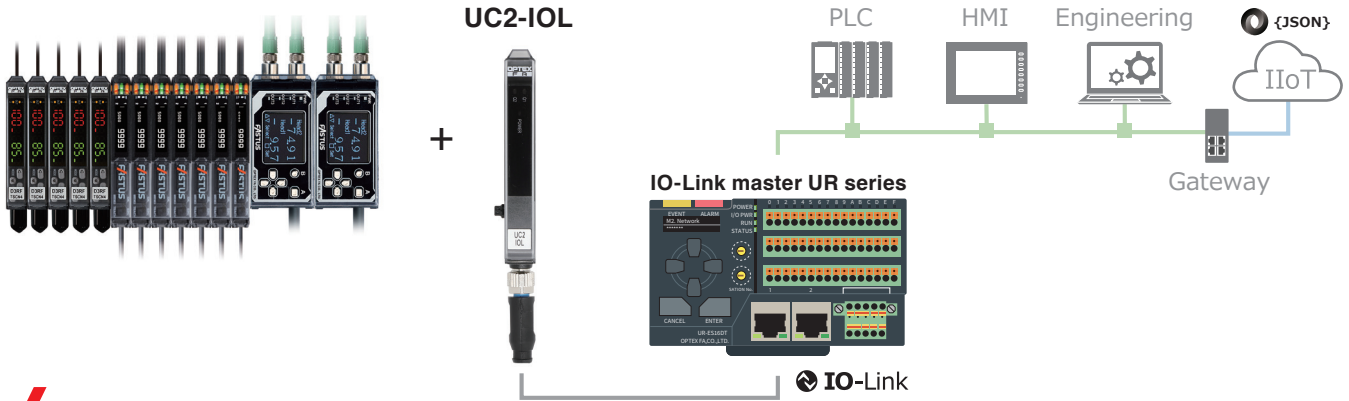




# IO-Link Gateway for Sensor Amplifiers



## Features

- Gateway unit to connect fiber sensors or displacement sensor amplifiers to IO-Link Master
- Compact design, same size as fiber amplifier
- Max. 16 units of fiber sensor amplifier or 8 units of displacement sensor amplifier can be connected.
- Fiber sensor amplifiers or displacement sensor amplifiers can be mixed connected.

### Connectable Device / Module Data via IO-Link Network

Data	D4RF	D3RF	D3WF	CD22*1	TD1*1	UC2
<b>Cyclic Communication</b>						
<b>Measurement Value<sup>2</sup></b>	Read: Light amount	Read: Light amount	Read: Light amount	Read: Distance	Read: Distance	--
<b>Output 1<sup>2</sup></b>	Read	Read	Read	Read*3	--	--
<b>Output 2<sup>2</sup></b>	Read	Read	--	Read*3	--	--
<b>Acyclic Communication</b>						
<b>Device status</b>	Read	Read	Read	Read	Read	Read
<b>Measurement mode</b>	--	--	--	Read/Write	Read/Write	--
<b>Threshold</b>	Read/Write	Read/Write	Read/Write	Read/Write	Read/Write	--
<b>Hysteresis</b>	Read/Write	Read/Write	Read/Write	Read/Write	Read/Write	--
<b>Calculation</b>	--	--	--	Read/Write: Mode, Offset	Read/Write: Mode, Offset	--
<b>Averaging</b>	--	--	--	Read/Write	Read/Write	--
<b>Response time / Sampling speed</b>	Read/Write	Read/Write	Read/Write	Read/Write	Read/Write	--
<b>Output mode</b>	Read/Write	Read/Write	Read/Write	Read/Write	Read/Write	Read/Write
<b>Polarity</b>	--	--	--	Read/Write	Read/Write	--
<b>Timer mode &amp; setting</b>	Read/Write	Read/Write	Read/Write	--	--	Read/Write

\*1: via CDA unit

\*2: Max. combination of 13 variables and 32 control outputs of 16 modules, 14 variables and 28 control outputs of 14 modules or 16 variables of 16 modules

\*3: per CDA unit

# Specifications

Model		UC2-IOL
IO-Link communication specification*1	Min. cycle time	2.2 ms
	Baud rate	COM3 (230.4 kbps)
	ISDU support	Available
	IO-Link revision	1.1
	No. of process input data bytes	32 bytes
	No. of process output data bytes	0 byte
Connected devices	Connectable models	D4RF/D3RF/D3WF Series inter-connection main unit and expansion unit CDA Series main unit and expansion unit
	No. of connectable units	Up to 16** (One CDA unit requires two spaces.)
Indicator		Power indicator (Green), SIO: Constant, IO-Link: Blinking, Output x 2 (Orange)
Rating	Supply voltage	SIO: 12 to 24 VDC including 10% of ripple (P-P) IO-Link: 18 to 24 VDC including 10% of ripple (P-P) (SELV and LIM or Class 2)*2
	Current consumption	Max. 40 mA*3
Control output		Push-Pull x 2 outputs, max. 100 mA/24 VDC (total for 2 outputs) Residual voltage: 1.8 V or less
External input		Teaching input / Smart task input
Connection type		Connector type: M8, 4-pin
Circuit stabilization time		D4RF: 300 ms with 1 D3RF/D3WF unit inter-connected: 300 ms, with 16 D3RF/D3WF units inter-connected: 350 ms CDA+CD22: 2.5 s CDA+TD1: 350 ms
Protection circuit		Reverse connection protection, Overcurrent protection
Environmental resistance	Installation location	Indoor use
	Operating temperature/humidity	-25 to +55°C/35 to 85% RH (no freezing or condensation)
	Storage temperature/humidity	-40 to +70°C/35 to 95% RH (no freezing or condensation)
	Vibration resistance	10 to 55 Hz; double amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions
	Shock resistance	Approx. 50 G (500 m/s <sup>2</sup> ), 3 times in each of the X, Y, and Z directions
	Degree of protection	IP 50 (According to IEC 60529, not UL certified)
	Pollution degree	2 or less
	Operating altitude	2000 m or less
Applicable regulation	EMC	EMC directive (2014/30/EU)
	RoHS	RoHS directive (2011/65/EU) China RoHS (Directive 32)
Applicable standards		EN 60947-5-2
Weight		Approx. 16 g
Material		Housing and protective cover: PC
Included accessory		Instruction manual

\*1. The operating temperature of the CDA Series expansion unit and the load current of the control output are restricted by the connected main unit as below.

## D4RF Series

No. of conneted unit	1 unit	2 units	3 to 5 units	6 to 16 units
Operating temperature	-25 to +55°C	-25 to +55°C	-25 to +50°C	-25 to +45°C
Max. load current per output	1 output setting	100 mA	20 mA	20 mA
	2 output setting	50 mA	10 mA	10 mA

## D3RF/D2WF Series

No. of conneted unit	1 to 3 unit(s)	4 to 8 units	9 to 16 units
Operating temperature	-25 to +55°C	-25 to +50°C	-25 to +45°C
Max. load current per output	100 mA	50 mA	20 mA

## CDA-M+CDA-S

No. of conneted unit	1 unit (Only CDA-M)	2 to 8 units
Operating temperature	-25 to +50°C	-25 to +50°C
Load current of control output	Up to 100 mA per output channel	Up to 100 mA per output channel (Up to 2 A including self-consumption)

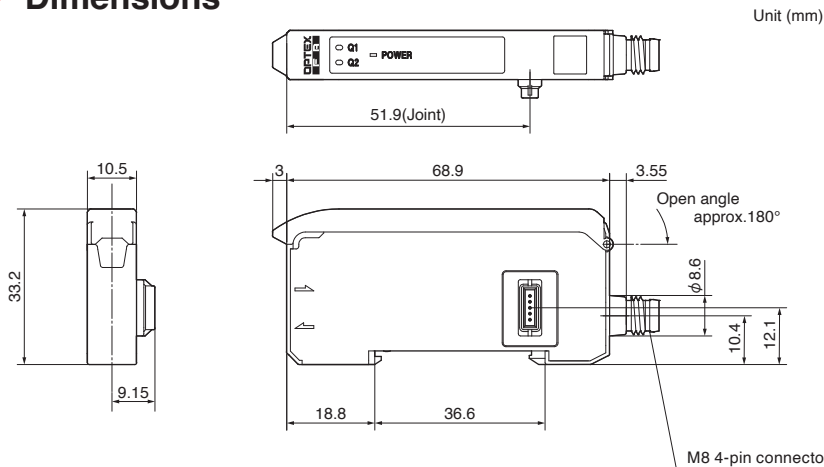
## CDA-M+CDA-S

No. of conneted unit	1 unit (Only CDA-DM2)	2 to 8 units
Operating temperature	-25 to +50°C	-20 to +45°C
Load current of control output	Up to 100 mA per output channel	Up to 20 mA per output channel

\*2. Use a Class 2 power supply or a power supply that conforms to the SELV circuit (Safety Extra-Low Voltage) and the LIM circuit (Limited Energy Circuit).

\*3. Not including control output load current.

# Dimensions



# Accessories

## Connector cables

Model	Description
M84CN-2S	Straight, M8 4-pin, 2 m
M84CN-5S	Straight, M8 4-pin, 5 m
M84CN-10S	Straight, M8 4-pin, 10 m



## End plate

Model	Description
BEF-EB01-W190	Delivered in 2 pieces



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