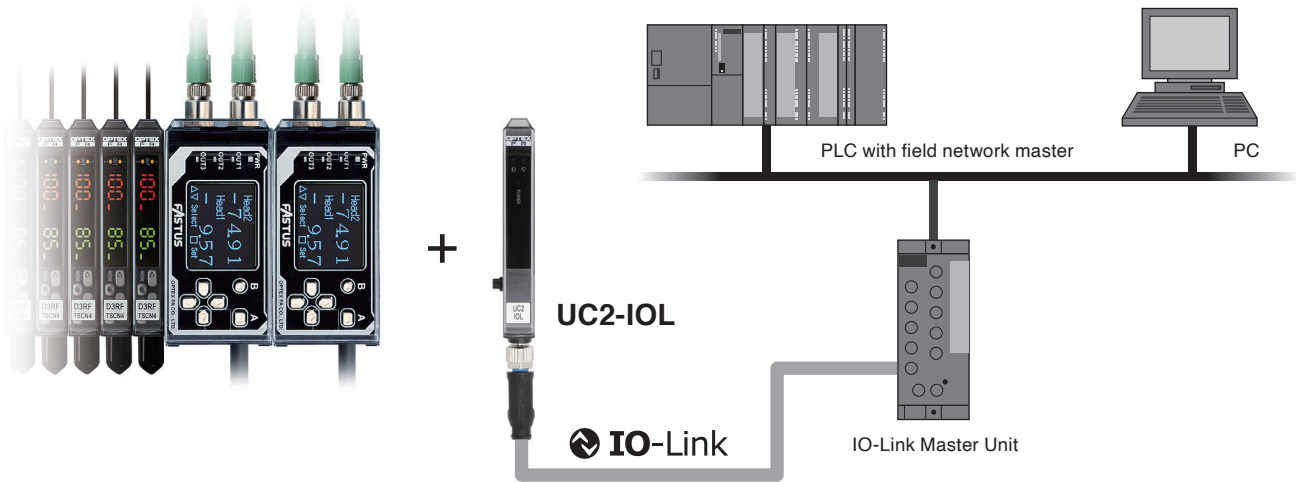


IO-Link Gateway for Sensor Amplifiers



Features

- Gateway unit to connect sensors to IO-Link network
- Compact interface to save space and channels on IO-Link Master unit
- Max. 16 units of D3RF/D3WF fiber sensor amplifier or 8 units of CDA displacement sensor amplifier can be connected.

Sharable Device/Module Data via IO-Link Network

Data	D3RF	D3WF	CD22*1	TD1*1	UC2
Cyclic Communication					
Measurement Value*2	Read: Light amount	Read: Light amount	Read: Distance	Read: Distance	--
Output 1*2	Read	Read	Read*3	--	--
Output 2*2	Read	--	Read*3	--	--
Acyclic Communication					
Device status	Read	Read	Read	Read	Read
Measurement mode	--	--	Read/Write	Read/Write	--
Threshold	Read/Write	Read/Write	Read/Write	Read/Write	--
Hysteresis	Read/Write	Read/Write	Read/Write	Read/Write	--
Calculation	--	--	Read/Write: Mode, Offset	Read/Write: Mode, Offset	--
Averaging	--	--	Read/Write	Read/Write	--
Response time / Sampling speed	Read/Write	Read/Write	Read/Write	Read/Write	--
Output mode & polarity	--	--	Read/Write	Read/Write	--
Timer mode & setting	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 Specification*1	Min. cycle time	2.2 ms
	Transmission rate	COM3 (230.4kbps)
	ISDU Support	Yes
	IO-Link Version	1.1
	Process input data byte	32 bytes
	Process output data byte	0 byte
Connectable device	Connectable models	D3RF/D3WF series inter-connection master and slave unit CDA series master unit and slave unit
	No. of connectable units	Up to 16 units*2 (One CDA unit requires two spaces)
	Indicator	Power (Green) SIO: Constant, IO-Link: Blinking Outputx2 (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)*3
	Current consumption	40mA Max.*4
Control output		Push-Pull x 2 ch Max.100mA/24VDC (Sum of 2 ch) Residual voltage 1.8 V Max.
External input		Teaching input / Smart task input
Connection		M8 4-pin male connector
Protection circuit		Reverse connection protection, Overcurrent protection
Environmental resistance	Installation location	Indoor use
	Ambient 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
	Vibration resistance	10 to 55 Hz; double amplitude 1.5 mm; 2 hours in each of the X, Y, and Z directions
	Shock resistance	500 m/s ² (approx. 50 G), 3 times in each of the X, Y, and Z directions
	Degree of protection	IP 50 (According to IEC 60529)
	Pollution degree	IEC 60664-1:2007 Pd2
	Operating altitude	Up to 2000m above sea level
Applicable regulation	EMC	EMC directive (2014/30/EU)
	Environment	RoHS directive (2011/65/EU) China RoHS (Directive 32)
NRTL Certification		UL Listed (in process)
Applicable standards		EN 60947-5-2
Weight		Approx. 16g
Material		Case, protective cover: PC
Included accessory		Instruction manual

*1. Index list and IODD file can be downloaded from www.optex-fa.com.

*2. The maximum number of connectable units varies depending on the ambient temperature.

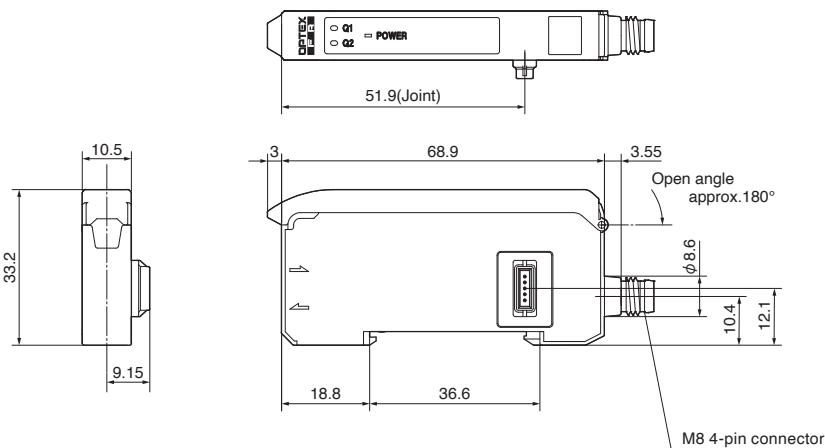
Series	D3RF/D3WF			CDA-M+CDA-S		CDA-DM2+CDA-S	
Ambient temperature	-25 to +55°C	-25 to +50°C	-25 to +45°C	-25 to +50°C	-25 to +50°C	-25 to +45°C	
No. of connectable units	1 to 3	4 to 8	9 to 16	1 to 8	1	2 to 8	

*3. 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).

*4. Not including control output load current.

Dimensions

Unit (mm)



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

UC2-IOL	M84CN Cable	Color	Description
①	①	Brown	IO-Link:18 to 24VDC
②	②	White	SIO:12 to 24VDC
③	③	Blue	External input/Output 2 (Q2)
④	④	Black	Output 1 (Q1)/IO-Link

End plate

Model	Description
BEF-EB01-W190	Delivered in 2 pieces



OPTEX FA CO., LTD. www.optex-fa.com

Japan	OPTEX FA Co., Ltd.	Kyoto	+81-75-325-1314	faovs@optex-fa.com
China	Guangzhou OPTEX Co., Ltd.	Guangzhou, Guangdong	+86-20-39922102	sales_ofc@optex-fa.com
Thailand	OPTEX (Thailand) Co., Ltd.	Bangkok	+66-2-168-3162	thailand@optex-fa.com
U.S.A.	OPTEX FA Inc.	Schaumburg, Illinois	+1-618-624-1365	ofi-sales@optexfa-america.com