

### Field Network Communication Units for Photoelectric Sensors



UC1-CL11



UC1-EC



UC1-EP



#### Features

- Compact communication units to field networks
- Max. 16 units of D3RF/D3WF fiber sensor amplifier can be connected.
- Max. 8 units of CDA displacement sensor amplifier can be connected.



PLC with field network master



PC

Configuration files:

CC-Link - CSP

EtherCAT - ESI

EtherNet/IP - EDS



**■ UC1 field network communication unit**

**■ Fiber sensor amplifiers**

- Up to 16 units of **D3RF/D3WF** connectable

**■ Displacement sensor amplifier**

- Up to 8 units of **CDA** amplifier connectable
- Up to 2 units of **TD1** or **CD22** can be connected with each **CDA** amplifier.

**■ Mixed connection with fiber sensor and displacement sensor amplifiers**

- Up to 16 units connectable.

# Specifications

Model	UC1-CL11	UC1-EC	UC1-EP
Supported version	CC-Link Ver. 1.10	EtherCAT*1 Slave	EtherNet/IP adapter
No. of occupied stations	2/3/4	-	-
Compliant standards	-	IEEE802.3u	IEEE802.3u
Communication range	100 to 1200 m	100 m max	100 m max
Network connection	Duplicated 5-pin terminal block	M12 4-pin socket connector	M12 4-pin socket connector
Baud rate	156 kbps/625 kbps/2.5 Mbps/5 Mbps/10 Mbps	100 Mbps	10/100 Mbps
Station number settings	1 to 63	-	-
Network cable	CC-Link-specified cable	STP Category 5 or higher	STP Category 5 or higher
Supported functions	-	Process data communication, mailbox communication (supports CoE)	Implicit message (Class1) Explicit message (Class3, UCMM) ACD (Address Conflict Detection) DLR (Device Level Ring) Static IP DHCP BOOTP
Power connection	2-pole terminal block connector	M8 4-pin connector	M8 4-pin connector
Data communication	-	PDO communication (sending: max. 120 bytes, receiving: max. 36 bytes) SDO communication	Implicit message (sending max. 40 byte, receiving 4 byte) Explicit message
Applicable regulations	EMC directive (2014/30/EU)	EMC directive (2014/30/EU)	EMC directive (2014/30/EU)
Applicable standards	EN 61000-6-2, EN 55011	EN 61000-6-2, EN 55011	EN 61000-6-2, EN 55011
NRTL Certification	-	UL Recognized Component	-

\*1. EtherCAT is a registered trademark of Beckhoff Automation GmbH & Co. KG.  
\*2. EtherNet/IP is a registered trademark or trademark of ODVA, Inc.

## Common specifications

Connected devices	Connectable models	D3RF/D3WF series main and expansion units CDA series main and expansion units
	No. of connectable units	Up to 16 units*2 (One CDA unit occupies two units)
	Connection type	5-pin connector for linking (functions as a linking end unit)
Rating	Supply voltage	12 to 24 VDC, including ±10% ripple (p-p)
	Power consumption	3 W or less
Protection circuit	Reverse connection protection	
Installation	35 mm DIN rail	
Material	PC	

\*2. The maximum number of connectable D3RF/D3WF units varies depending on the ambient temperature.

Ambient temperature	-25 to +55°C	-25 to +50°C	-25 to +45°C
No. of connectable D3RF/D3WF	1 to 3	4 to 8	9 to 16

## Accessories

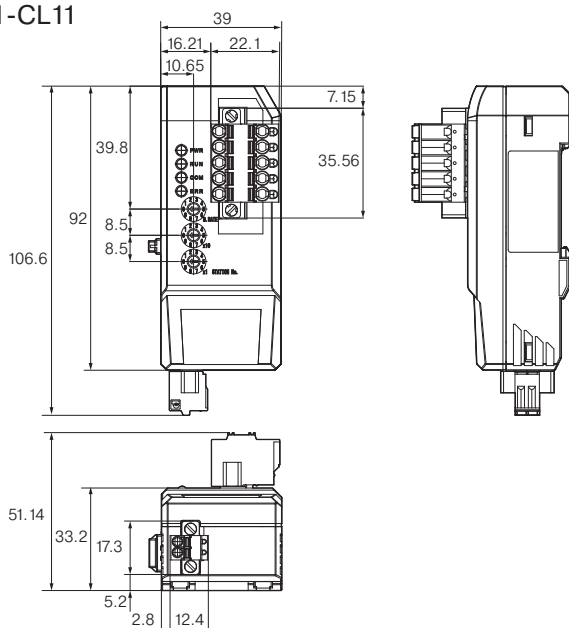
### Power cables for UC1-EC/-EP

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

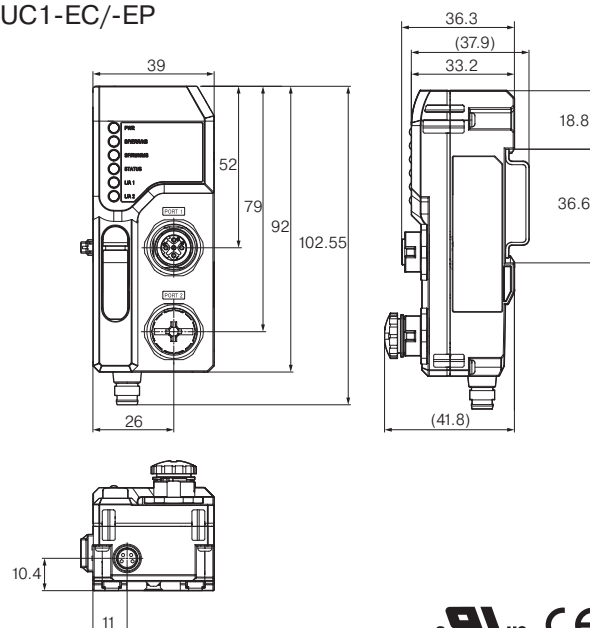
## Dimensions

Unit (mm)

UC1-CL11



UC1-EC/-EP



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