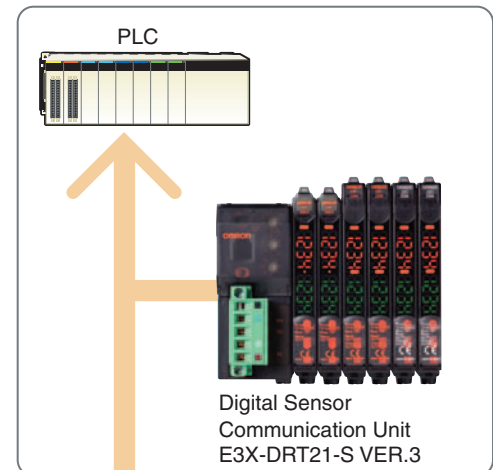


DeviceNet Model

The DeviceNet Communication Unit That Simplifies Managing Sensor Settings

- ON/OFF signals and incident light levels can be sent to the host PLC without any need for programming (DeviceNet communications slave functionality).
- Threshold values and function settings can be read, written, or taught (using the Message Communications function).
- Simply connect the communication cables and slide the Amplifiers from the side for wire-saving.
- Up to 16 Sensor Amplifiers can be connected.

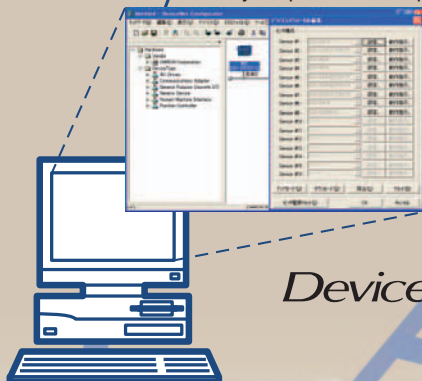


CE For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

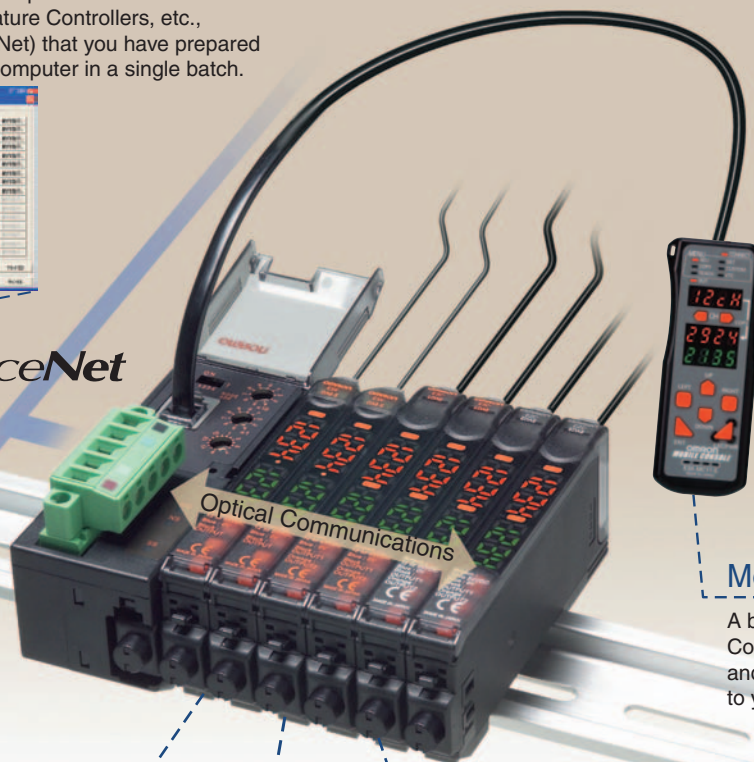
A Network That Expands Your World

Configurator

Download a group of parameters for devices (Sensors, Temperature Controllers, etc., supporting DeviceNet) that you have prepared on your personal computer in a single batch.



DeviceNet



Mobile Console

A built-in interface for a Mobile Console lets you bring setting and confirmation operations to your fingertips.

Monitor operating hours.

The operating hours for sensors can be stored in internal memory and used for planning maintenance and other applications.

Up to 16 channels can be connected.

Supports a wide range of sensors.

The Unit supports a variety of digital sensors, including Fiber Sensors, Laser Sensors, and Proximity Sensors.

Ordering Information

■ Digital Sensor Communication Unit

Type	Model
Device Net	E3X-DRT21-S VER.3

■ Wire-saving Connector (sold separately)

Type	Model
Cordless Slave Connector	E3X-CN02

Note : Order as many Connectors as the number of Sensors.

Ratings and Specifications

Item	Description
Communications Method	DeviceNet communications
Communications functions	Remote I/O Communications Slave function
	Monitors ON/OFF output, status, incident light level (digital display data)
	Message Communications function
	Sets parameters using Explicit messages
	Configurator
	Edits slave device parameters, enables device monitor functions
Mobile Console connection	E3X-MC11-SV2 can be connected
Power supply	Supplied from the DeviceNet communications connector (power is also supplied to all connected Sensors through Wire-reducing Connectors)
Maximum connectable Sensors (See note 1.)	For remote I/O communications 1-CH mode (See note 2.) : 13 For remote I/O communications 2-CH mode (See note 3.) or for remote I/O communications 2-CH mode + detection level monitoring mode (See note 4.) : 16
Connectable Sensors (See note 5.)	E3X-DA-S Series (See note 7.) or E3X-MDA Series (See note 8.) Digital Fiber Sensor E3C-LDA Series Laser Photoelectric Sensor with Separate Digital Amplifier (See note 9.) E2C-EDA High-resolution Digital Proximity Sensor with Separate Amplifier (use connector-type Amplifier Units and the E3X-CN02 Cordless Slave Connector)
Power supply voltage	11 to 25 VDC
Current consumption (See note 6.)	70 mA max.
Ambient operating temperature	-20 to 55°C
Ambient operating humidity	30% to 85% (with no condensation)
Storage temperature	-30 to 70°C
Dimensions (mm)	30 x 34.6 x 71.3 (WxHxD)
Weight (packed state)	Approx. 150 g

Note 1: When any of the following Sensors is connected, two words are allocated per Sensor and each Sensor is counted as two Sensors for the number of connected Sensors.

E3X-DA-S (□: 7/9), E3X-DA-TW-S (□: 6/8), E3X-MDA (□: 6/8), E3C-LDA (□: 6/8), E2C-EDA (□: 6/8)

2: Communications is possible for the ON/OFF output data from 13 Units. One word is allocated as the input area in the Master.

3: Communications is possible for the ON/OFF output data from 16 Units and the number of connected Sensors. Two words are allocated as the output area in the Master.

4: Communications is possible for the ON/OFF output data from 16 Units, the number of connected Sensors, and the detection levels for the connected Sensors.

Two words are allocated as the input area and one word is allocated for the number of connected Sensors in the Master.

5: Connection cannot be performed if the response speed of the Sensor is set to super-high-speed mode.

6: This does not include the current supplied to the Sensor.

7: E3X-DA-S Series in this catalog have been discontinued at the end of March 2017 and end of March 2019.

8: E3X-MDA Series will be accepted until the end of August 2021.

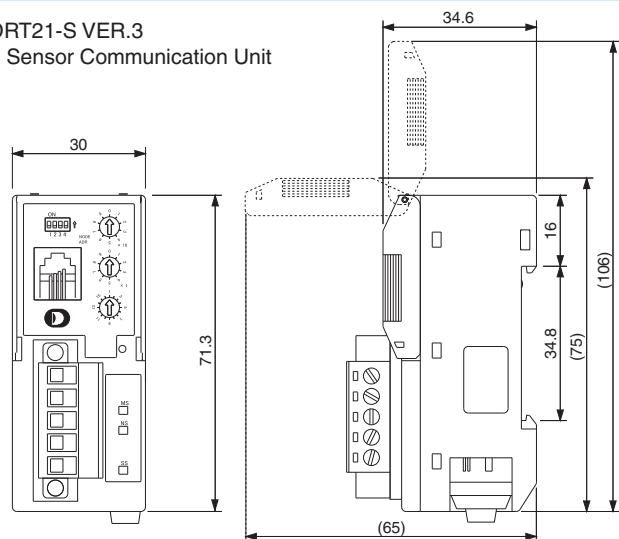
9: E3C-LDA Series will be accepted until the end of February 2022.

Dimensions (mm)

Tolerance class IT16 applies to dimensions in this datasheet unless otherwise specified.

E3X-DRT21-S VER.3

Digital Sensor Communication Unit



This document provides information mainly for selecting suitable models. Please read the *Instruction Sheet* carefully for information that the user must understand and accept before purchase, including information on warranty, limitations of liability, and precautions.

Note: Do not use this document to operate the Unit.

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