**PRODUCT NEWS**

# Product Discontinuation Notices

**Fiber Sensors**

OMRON

**Issue Date**
**March 2, 2015**

**No. 2015036CE**

## Discontinuation Notice of E3X-DA-N series (partially).

### Product Discontinuation

Digital Fiber Amplifier

**Model E3X-DA-N series (partially)**

### Recommended Replacement

Smart Fiber Amplifier Unit

**Model E3X-HD series (Model E3NX-FA series)**

**There are some models which have no recommended replacement.**

### [ Discontinuation date ]

The end of March, 2017

### [ Caution on recommended replacement ]

1) Optical communication to E3X-DA-N/NA/SD series is not available. Notice that channel recognition and Mutual interference prevention is not available at communication status.
2) Mobile console E3X-MC11 is not available.
3) The Communication Unit E3X-DRT21、E3X-SRT21 and E3X-CIF11 cannot be connected.
4) When using Fiber head E32-D61/D73/D81R/T61/T81R/T84S (D81R/T61/T81R/T84S are discontinued) series, notice that the pitch between deliver and receiver hole is different compared with E3X-HD series, and installation is unavailable. Please also change the Fiber head to the following types. E32-D61-S/D73-S/D81R-S/T61-S/T81R-S/T84S-S series

Please inquire to our salesperson about the in-depth contents.

### [ Difference from discontinued product ]

| Recommended replacement Model | Body Color | Dimen-sions | Wire connection | Mounting Dimensions | Charac-teristics | Operation ratings | Operation methods |
|---|---|---|---|---|---|---|---|
| Model E3X-HD series | * | -- | ** | ** | * | * | * |
| Model E3NX-FAseries | * | -- | ** | ** | * | * | * |

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

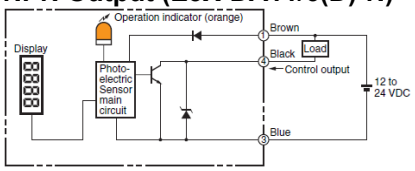
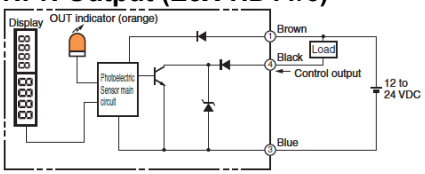
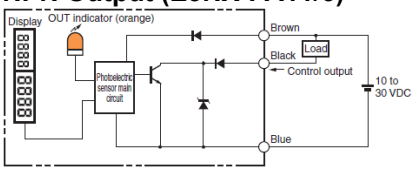
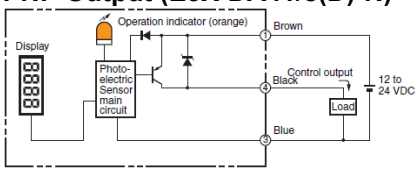
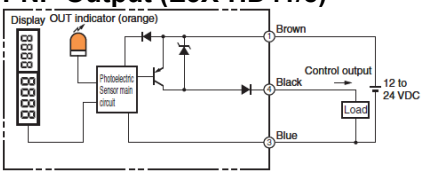
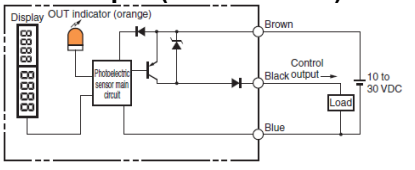
## [ Product Discontinuation and recommended replacement ]

| Product discontinuation | Recommended replacement |
|---|---|
| E3X-DA11D 2M | E3X-HD11 2M |
| E3X-DA11-N 0.5M | E3X-HD11 2M |
| | E3NX-FA11 2M |
| E3X-DA11-N 2M | E3X-HD11 2M |
| | E3NX-FA11 2M |
| E3X-DA11-N 5M | E3X-HD11 5M |
| | E3NX-FA11 5M |
| E3X-DA41D 2M | E3X-HD41 2M |
| E3X-DA41-N 2M | E3X-HD41 2M |
| | E3NX-FA41 2M |
| E3X-DA6 | E3X-HD6 |
| | E3NX-FA6 |
| E3X-DA6D | E3X-HD6 |
| E3X-DA8 | E3X-HD8 |
| | E3NX-FA8 |
| E3X-DA8D | E3X-HD8 |
| E3X-DA11-N-6 2M | No recommended replacement |
| E3X-DA11-N-C1 | No recommended replacement |
| E3X-DA11-N-ECON 0.3M | No recommended replacement |
| E3X-DA11-N-M1J 0.3M | No recommended replacement |
| E3X-DA11-N-R 2M | No recommended replacement |
| E3X-DA6-6 | No recommended replacement |
| E3X-DA6-P | No recommended replacement |
| E3X-DAS8 | No recommended replacement |
| E3X-RM1-1 | No recommended replacement |
| E3X-RM1-2 | No recommended replacement |

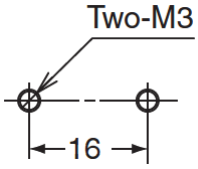
## [ Body color ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
|  |  |  |
| Sensor: black<br>Cover printing: orange<br>Case: black (no printing lable) | Sensor: black<br>Cover printing: silver<br>Case: nameplate with silver printing | Sensor: black<br>Cover printing: silver<br>Case: nameplate with silver printing |
| **Operation panel**<br>  |  |  |
| 7-seg display: red<br>Operation button: orange<br>Operation panel printing: orange | 7-seg display: green + orange<br>Operation button: black<br>Operation panel printing: white | 7-seg display: green + white<br>Operation button: black<br>Operation panel printing: white |
| **Cable**<br>  |  | |
| Dark grey | Black | |

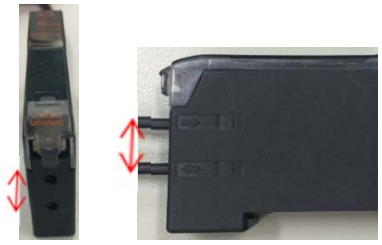
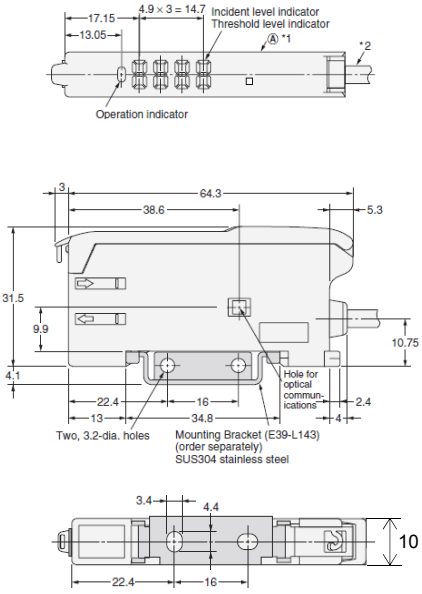
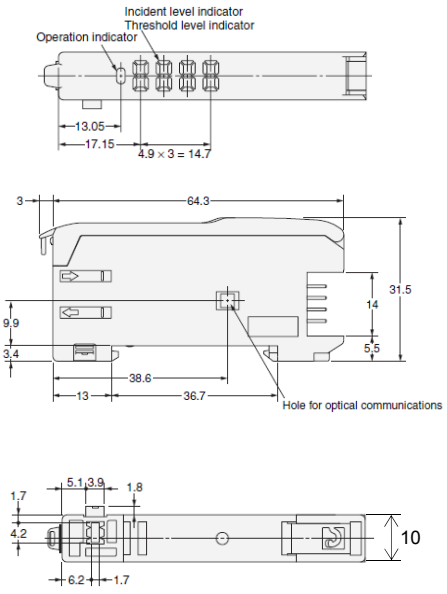
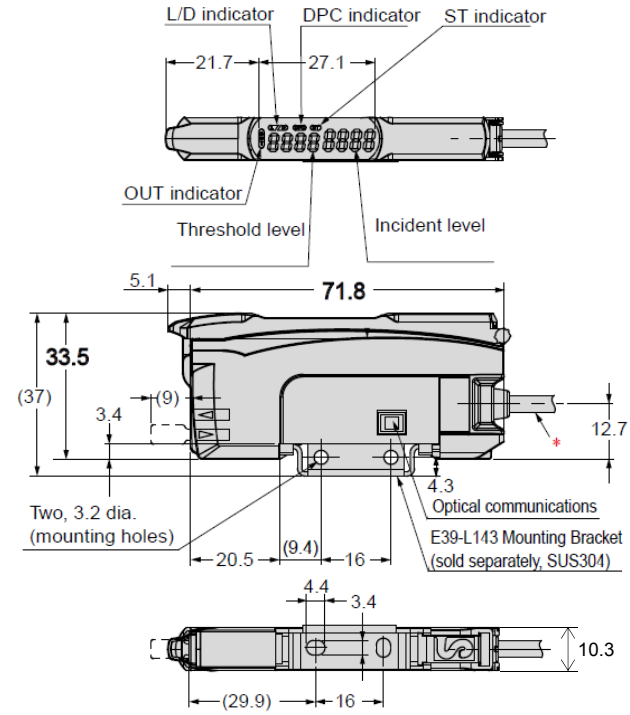
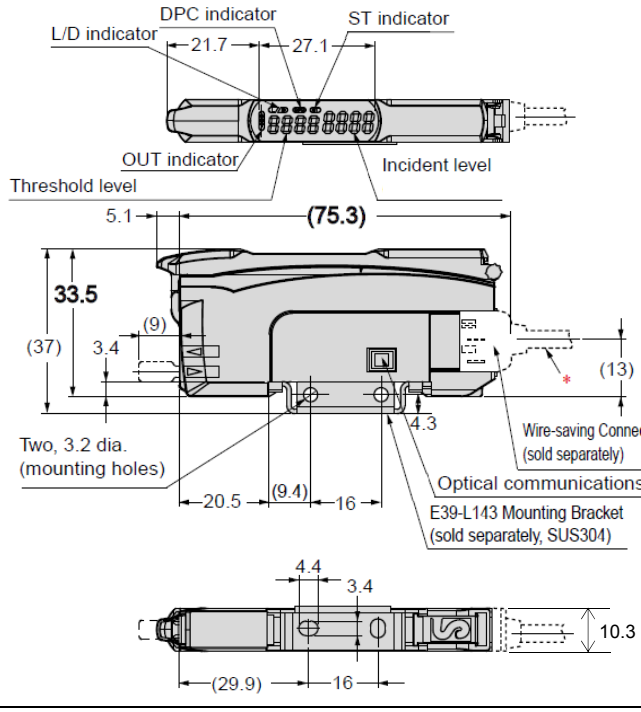
## [ Wire connection ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
| **NPN Output (E3X-DA11/6(D)-N)**<br>  | **NPN Output (E3X-HD11/6)**<br>  | **NPN Output (E3NX-FA11/6)**<br>  |
| **PNP Output (E3X-DA41/8(D)-N)**<br>  | **PNP Output (E3X-HD41/8)**<br>  | **PNP Output (E3NX-FA41/8)**<br>  |

## [ Mounting dimensions ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
| |  | |

## [ Dimensions ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
| **Common**<br>The pitch between deliver and receiver hole: 8 mm<br>  | The pitch between deliver and receiver hole: 4.5 mm<br>  | |
| **Pre-wired type**<br>  <br>**Wire-saving connector**<br>  |  <br>  | |

## [ Characteristics ]

| Item | | Product discontinuation Model E3X-DA-N series | Recommendable replacement 1 Model E3X-HD series | Recommendable replacement 2 Model E3NX-FA series |
|---|---|---|---|---|
| **Light source (wavelength)** | | Red LED (660 nm) | Red, 4-element LED (625 nm) | |
| **Power supply voltage** | | 12 to 24 VDC±10%, ripple (p-p) 10% max. | | 10 to 30 VDC±10%, ripple (p-p) 10% max. |
| **Power consumption (at power supply voltage of 24 VDC)** | **Normally mode** | 960 mW max. (Current consumption: 40 mA max.) | 720 mW max. (Current consumption: 30 mA max.) | 960 mW max. (Current consumption: 40 mA max.) |
| | **Eco mode (Digital display not lit)** | 600 mW max. (Current consumption: 25 mA max.) | 530 mW max. (Current consumption: 22 mA max.) | 720 mW max. (Current consumption: 30 mA max.) |
| | **Eco Lo mode (Luminance change of digital display)** | 720 mW max. (Current consumption: 30 mA max.) | 640 mW max. (Current consumption: 26 mA max.) | 840 mW max. (Current consumption: 35 mA max.) |
| **Control output** | | Load power supply voltage: 26.4V DC max.<br>open-collector output<br>Load current: 50 mA<br>Residual voltage:<br>At load current of less than 50 mA: 1 V max. | Load power supply voltage: 26.4 V DC max.<br>open-collector output<br>Load current:<br>Groups of 1 to 3 Amplifier Units: 100 mA max.<br>Groups of more than 4 Amplifier Units: 20 mA max.<br>Residual voltage:<br>At load current of less than 10 mA: 1 V max.<br>At load current of 10 to 100 mA: 2 V max. | Load power supply voltage: 30 V DC max<br>open-collector output<br>Load current:<br>Groups of 1 to 3 Amplifier Units: 100 mA max.<br>Groups of more than 4 Amplifier Units: 20 mA max.<br>Residual voltage:<br>At load current of less than 10 mA: 1 V max.<br>At load current of 10 to 100 mA: 2 V max. |
| **Protection circuits** | **Power supply reverse polarity protection** | Provided | | |
| | **Output short-circuit protection** | Provided | | |
| | **Out reverse polarity protection** | Not Provided | Provided | |
| | **Mutual interference prevention (supported for up to 10 Units)** | Provided | | |
| **Response time** | | Super-high-speed mode;<br>Operate/reset: 0.25 ms<br>Standard mode<br>Operate/reset: 1 ms<br>Super-long-distance mode<br>Operate/reset: 4ms<br>The communications function and mutual interference prevention function are disabled when the detection mode is set to Super-high-speed mode. | Super-high-speed mode<br>Operate/reset: 0.05 ms<br>High-speed mode<br>Operate/reset: 0.25 ms<br>Standard mode<br>Operate/reset: 1 ms<br>Giga power mode<br>Operate/reset: 16 ms<br>The communications function and mutual interference prevention function are disabled when the detection mode is set to Super-high-speed mode. | Super-high-speed mode<br>Operate/reset: 0.03 ms<br>High-speed mode<br>Operate/reset: 0.25 ms<br>Standard mode<br>Operate/reset: 1 ms<br>Giga power mode<br>Operate/reset: 16 ms<br>The communications function and mutual interference prevention function are disabled when the detection mode is set to Super-high-speed mode. |
| **Sensitivity setting** | | Teaching or manual method | | |
| **Functions** | **OFF delay timer: 0 to 200 ms Using Mobile Console: OFF delay, ON delay or one shot (selectable)** | OFF delay timer: 0 to 200 ms<br>Using Mobile Console:<br>OFF delay, ON delay or one shot (selectable) | Timer disable/OFF delay/ON delay/One shot (selectable) | Timer disable/OFF delay/ON delay/one shot, or ON delay + OFF delay (selectable) |
| | **Automatic power control (APC)** | Always enabled | | |
| | **Zero-reset** | Negative values can be displayed | Negative values can be displayed (Threshold value is shifted) | |
| | **Initial-reset** | Provided | Initial reset/user reset (selectable) | |

| Item | | Product discontinuation Model E3X-DA-N series | Recommendable replacement 1 Model E3X-HD series | Recommendable replacement 2 Model E3NX-FA series |
|---|---|---|---|---|
| **Indicators** | | Operation indicator (orange)<br>7-segment digital incident level display (red),<br>7-segment digital incident level percentage display (red),<br>threshold and excess gain 2-color double bar indicators (green and red),<br>7-segment digital threshold display (red) | Operation indicator (orange)<br>7-segment digital incident level display (Sub digital incident level display: green + Main digital incident level display: red),<br>L/D indicator (orange),<br>ST indicator (blue),<br>DPC indicator (green) | 7-segment displays (Sub digital display: green + Main digital display: white)<br>OUT indicator (orange),<br>L/D indicator (orange),<br>ST indicator (blue),<br>DPC indicator (green),<br>OUT selection indicator (orange, only on models with 2 outputs) |
| **Display timing** | | normal/peak-hold/bottom-hold possible | normal/peak-hold/peak· bottom-hold/percent display/bar display/channel number possible | normal/peak-hold/peak· bottom-hold/percent display/bar display/channel number /change finder possible |
| **Display orientation** | | Switching between normal/reverse possible | | |
| **Optical axis adjustment (hyper-flashing function)** | | Provided | Not provided | |
| **Ambient Illumination (receiver side)** | **Incandescent lamp** | 10,000 lx max. | 20,000 lx max. | |
| | **Sunlight** | 20,000 lx max. | 30,000 lx max. | |
| **Ambient temperature** | **Operating** | Groups of 1 to 3 Amplifiers:<br>-25 to +55°C,<br>Groups of 4 to 11 Amplifiers:<br>-25 to +50°C,<br>Groups of 12 to 16 Amplifiers:<br>-25 to +45°C | Groups of 1 to 2 Amplifiers:<br>-25 to +55°C,<br>Groups of 3 to 10 Amplifiers:<br>-25 to +50°C,<br>Groups of 11 to 16 Amplifiers:<br>-25 to +45°C | Groups of 1 to 2 Amplifiers:<br>-25 to +55°C,<br>Groups of 3 to 10 Amplifiers:<br>-2 to +50°C,<br>Groups of 11 to 16 Amplifiers:<br>-25 to +45°C,<br>Groups of 17 to 30 Amplifiers:<br>-25 to +40°C |
| | **Storage** | -30 to +70°C (with no condensation) | | |
| **Weight (Packed state)** | **Pre-wired (standard cable length: 2 m)** | Approx. 100 g | Approx. 105 g | Approx. 115 g |
| | **Standard connector** | Approx. 55 g | Approx. 60 g | |
| **Material** | **Case** | Polybutylene terephthalate (PBT) | Polycarbonate | |
| | **Cover** | Polycarbonate | | |

## [ Operation ratings ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
| **Sensing distance** | **Sensing distance** | **Sensing distance** |

| Mldel | Sensing distance (mm) | | |
|---|---|---|---|
| | Super-long-distance mode | Standard mode | Super-high-speed mode |
| E32-T11R 2M | 670 | 530 | 200 |
| E32-D11R 2M | 220 | 170 | 80 |

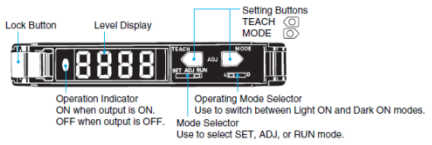
| Model | Sensing distance (mm) | | | |
|---|---|---|---|---|
| | Giga mode | Standard mode | High-speed mode | Super-high-speed mode |
| E32-T11R 2M | 2,000 | 1,000 | 700 | 280 |
| E32-D11R 2M | 840 | 350 | 240 | 100 |

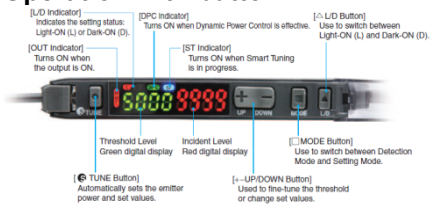
| Model | Sensing distance (mm) | | | |
|---|---|---|---|---|
| | Giga mode | Standard mode | High-speed mode | Super-high-speed mode |
| E32-T11R 2M | 3,000 | 1,500 | 1,050 | 280 |
| E32-D11R 2M | 1,260 | 520 | 360 | 100 |

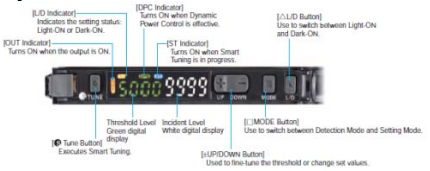
Please refer to the catalog about combination of other fiber heads.

## [ Operation methods ]

| Product discontinuation<br>Model E3X-DA-N series | Recommendable replacement 1<br>Model E3X-HD series | Recommendable replacement 2<br>Model E3NX-FA series |
|---|---|---|
| **Operation with slide switch and button** | **Operation with button** | **Operation with button** |




Please refer to the instruction sheet about in-depth operating method.

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.