



NO:PH-197PRODUCT:E3X-DA-N Fiber-optic AmplifierDATE:April 2015TYPE:Partial Discontinuation Notice

# Select E3X-DA-N Fiber-Optic Sensor Amplifiers to be Discontinued; Replace with E3X-HD or E3NX-FA Series

#### Discontinuation date: February 2017

Note: Date is subject to change based on raw materials and components availability at the factory.

### **Affected Parts**

Product discontinuation	Recommended replacement				
E3X-DA11D 2M	E3X-HD11 2M				
E3X-DA11-N 0.5M	E3X-HD11 2M				
E3X-DATT-N 0.5M	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				

**Note:** The part numbers above with a "2M" ending may also exist without the "2M". Consider these two parts as equivalent.

See the following pages for an explanation of Detail of Differences.

## **Cautions on Applying Replacements**

- 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 emitter and receiver hole is different compared with E3X-HD series, and they are not compatible. Please also change the Fiber head to the following types: E32-D61-S/D73-S/D81R-S/T61-S/T81R-S/T84S-S series

## **Detail of Differences**

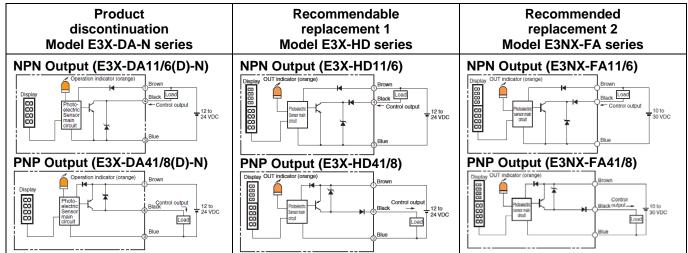
#### **Body Color**

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

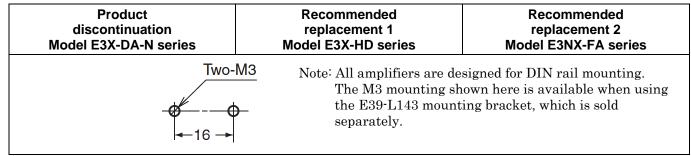
#### **Fiber Insertion Ports**

Product	Recommended	Recommended		
discontinuation	replacement 1	replacement 2		
Model E3X-DA-N series	Model E3X-HD series	Model E3NX-FA series		
Common The pitch between emitter and receiver hole: Smm	The pitch between emitter a	and receiver hole: 4.5mm		

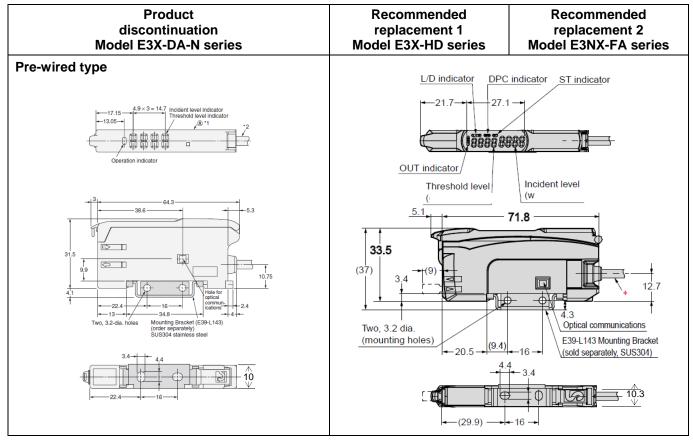
#### **Wiring Diagrams**

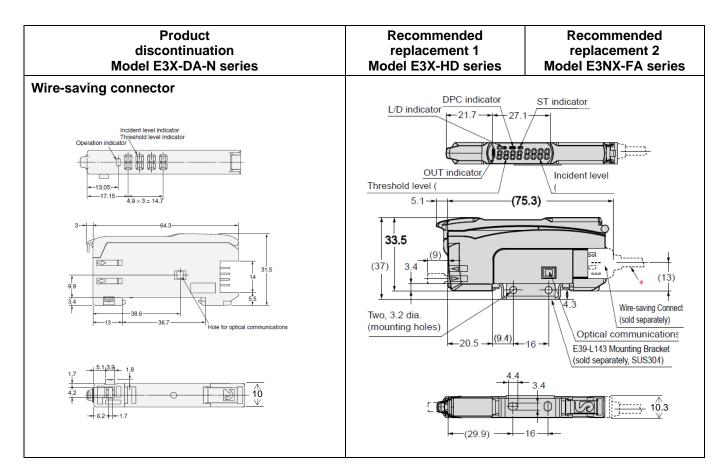


#### **Mounting Dimensions**



#### Dimensions





#### Characteristics

Item		Product discontinuation Model E3X-DA-N series	Recommended replacement 1 Model E3X-HD series	Recommended replacement 2 Model E3NX-FA series		
Light source (w	ht source (wavelength) Red LED(660nm)		Red,4-element LED(625nm)	-		
Power supply v	voltage	12 to 24 VDC±10% ripple (p-p) 10%m	10 to 30 VDC±10%, ripple (p-p) 10% max.			
	Normally mode	960mW max. (Current consumption: 40mA max.)	720mW max. (Current consumption: 30mA max.)	960mW max. (Current consumption: 40mA max.)		
Power consumption (a power supply	at Eco mode (Digital display not lit)	600mW max. (Current consumption: 25mA max.)	530mW max. (Current consumption: 22mA max.)	720mW max. (Current consumption: 30mA max.)		
voltage of 24VD	DC) Eco Lo mode (Luminance change of digital display)	720mW max. (Current consumption: 30mA max.)	640mW max. (Current consumption: 26mA max.)	840mW max. (Current consumption: 35mA max.)		
Control output		Load power supply voltage: 26.4V DC max. Open-collector output Load current: 50mA Residual voltage: At load current of less than 50mA:1V max.	Load power supply voltage: 26.4V DC max. Open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100mA max. Groups of more than 4 Amplifier Units: 20mA max. Residual voltage: At load current of less than 10mA: 1V max. At load current of 10 to 100mA: 2V max.	Load power supply voltage: 30V DC max Open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100mA max. Groups of more than 4 Amplifier Units: 20mA max. Residual voltage: At load current of less than 10mA: 1V max. At load current of 10 to 100mA: 2V max.		
	Power supply reverse polarity protection	Provided				
Output short-circuit protection		Provided				
circuits	Out reverse polarity protection	Not Provided	Provided			
	Mutual interference prevention(supported for up to 10Units)	Provided				

Item		Product discontinuation Model E3X-DA-N series	Recommended replacement 1 Model E3X-HD series	Recommended replacement 2 Model E3NX-FA series				
Response time		Super-high-speed mode; Operate/reset: 0.25ms Standard mode Operate/reset: 1ms Super-long-distance mode Operate/reset: 4ms 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 Operate/reset: 0.05ms High-speed mode Operate/reset: 0.25ms Standard mode Operate/reset: 1ms Giga power mode Operate/reset: 16ms 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 Operate/reset: 0.03ms High-speed mode Operate/reset: 0.25ms Standard mode Operate/reset: 1ms Giga power mode Operate/reset: 16ms 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 200ms Using Mobile Console: OFF delay, ON delay or one shot (selectable)	OFF delay timer: 0 to 200ms Using Mobile Console: 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 (Three	shold value is shifted)				
	Initial-reset	Provided	Initial reset/user reset(selectable)					
Indicators		Operation indicator (orange) 7-segment digital incident level display (red), 7-segment digital incident level percentage display (red), threshold and excess gain 2-color double bar indicators (green and red), 7-segment digital threshold display (red)	Operation indicator (orange) 7-segment digital incident level display (Sub digital incident level display: green + Main digital incident level display: red), L/D indicator (orange), ST indicator (blue), DPC indicator (green)	7-segment displays (Sub digital display: green + Main digital display: white) OUT indicator (orange), L/D indicator (orange), ST indicator (blue), DPC indicator (green), 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 pos	ossible					
Optical axis adjustn (hyper-flashing function		Provided	Not provided					
Ambient	Incandescent lamp	10,000 lx max.	20,000 lx max.					
Illumination (receiver side)	Sunlight	20,000 lx max.	30,000 lx max.					
Ambient Operating -2 temperature G		Groups of 1 to 3 Amplifiers: -25 to +55°C Groups of 4 to 11 Amplifiers: -25 to +50°C Groups of 12 to 16 Amplifiers :-25 to +45°C	Groups of 1 to 2 Amplifiers: -25 to +55°C Groups of 3 to 10 Amplifiers: -25 to +50°C Groups of 11 to 16 Amplifiers: -25 to +45°C	Groups of 1 to 2 Amplifiers: -25 to $+55^{\circ}$ C Groups of 3 to 10 Amplifiers: -25 to $+50^{\circ}$ C Groups of 11 to 16 Amplifiers: -25 to $+45^{\circ}$ C Groups of 17 to 30 Amplifiers: -25 to $+40^{\circ}$ C				
Storage		-30 to +70°C (with no condensation)						
Weight (Packed state) (Packed state) (Packed state) (Packed state) (Packed state) (Packed state) (Packed state) (Packed state) (Packed state)		Approx. 100g	Approx. 105g	Approx. 115g				
		Approx. 55g	Approx. 60g					
(Packed state)	connector	Approx. 33g						
(Packed state)	connector Case	Polybutylene terephthalate (PBT) Polycarbonate (PC)	Polycarbonate (PC)					

#### **Operation Ratings**

Product discontinuation	Sensing distance								
Model E3X-DA-N series		Sensing distance (mm)							
	Midel	Super-long-dis mode	uper-long-distance mode		Standard mode Sup		Super-high-speed mode		
	E32-T11R 2M		670		530		200		
	E32-D11R 2M		220		170		80		
		-							
Recommended replacement 1									
Model E3X-HD series	Model		Sensing distance (mm)						
			Giga	mode	Standa	ard mode	High-sp mod		Super-high- speed mode
	E32-T11R 2M			2,000		1,000		700	280
	E32-D11R 2M			840		350		240	100
Recommended replacement 2	Sensing d	istance							
Model E3NX-FA series	Model		Sensing distance (mm)						
		Giga			rd mode		eed mode		-high-speed mode
	E32-T11R 2M		3,000		1,50				
	E32-D11R 2M		1,260		52	520 360		100	

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

#### **Operation Methods**

Product	Recommended	Recommended
discontinuation	replacement 1	replacement 2
Model E3X-DA-N series	Model E3X-HD series	Model E3NX-FA series
Operation with slide switch and button Leve Display Design Display Displa	Operation with button Definition of the theorem of	Operation with button State is a subset of the subset of

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.