

Discontinuation Notice of E3X-DA-S series (partially).

Product Discontinuation

Digital Fiber Amplifier Unit / Advance Digital Fiber Amplifier Unit

Model E3X-DA0/1/2/4/5/6/7/8/9[]-S

Model E3X-DA1/4/6/8[]AT-S

Model E3X-DA1/4/6/8[]SE-S

Model E3X-DA1/4[]TG-S



Model E3X-DA1/4/6/8[]RM-S

Model E3X-DA1/4/6/8[]TW-S

Model E3X-DA2/5/7/9[]R-S

Model E3X-DA2/5/7/9[]F-S

Recommended Replacement

Smart Fiber Amplifier Unit

Model E3X-HD series

When External input and 2 output are needed.

(Model E3NX-FA 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) Instead of ATC function, DPC is available for E3X-HD series as an upwardly compatible function. Please refer to characteristics and operation ratings for details.
- 2) There are no counter functions.
- 3) Mobile console E3X-MC11-SV2 is not available.
- 4) The Communication Unit E3X-DRT21-S VER.3 cannot be connected.
Only E3X-HD0 can be connected to Communication Unit E3X-CRT, E3X-ECT.
E3NX-FA0 doesn't work when combined with Communication Unit E3X-CRT or E3X-ECT .
- 5) Optical communication, to E3X-DA-S series is not available for E3NX-FA. Notice that channel recognition and Mutual interference prevention is not available at communication status
- 6) External input, alarm output, area output are not available for E3X-HD. If necessary, E3NX-FA series is recommended.
- 7) Differential function is not available for E3NX-FA series. E3X-HD series is recommended if necessary.
- 8) The power supply voltage and load current are different with E3X-DA-S series and E3NX-FA series.

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

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
Model E3X-HD series	*	*	**	**	*	*	*
Model E3NX-FA series	*	*	**	**	*	*	*

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

[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
E3X-DA0-S	E3X-HD0
	E3NX-FA0
E3X-DA11AT-S 2M	E3X-HD11 2M
	E3NX-FA21 2M
E3X-DA11RM-S 2M	E3NX-FA21 2M
E3X-DA11-S 2M	E3X-HD11 2M
	E3NX-FA11 2M
E3X-DA11-S 5M	E3X-HD11 5M
	E3NX-FA11 5M
E3X-DA11SE-S 2M	E3X-HD11 2M
	E3NX-FA11 2M
E3X-DA11TG-S 2M	E3X-HD11 2M
	E3NX-FA11 2M
E3X-DA11TW-S 2M	E3NX-FA21 2M
E3X-DA11TW-S 5M	E3NX-FA21 2M
E3X-DA21F-S 2M	E3NX-FA11 2M
E3X-DA21R-S 2M	E3NX-FA21 2M
E3X-DA21-S 2M	E3X-HD11 2M
	E3NX-FA21 2M
E3X-DA21-S 5M	E3X-HD11 5M
	E3NX-FA21 5M
E3X-DA41AT-S 2M	E3X-HD41 2M
	E3NX-FA51 2M
E3X-DA41RM-S 2M	E3NX-FA51 2M
E3X-DA41-S 2M	E3X-HD41 2M
	E3NX-FA41 2M
E3X-DA41-S 5M	E3X-HD41 5M
	E3NX-FA41 5M
E3X-DA41SE-S 2M	E3X-HD41 2M
	E3NX-FA41 2M
E3X-DA41TG-S 2M	E3X-HD41 2M
	E3NX-FA41 2M
E3X-DA41TW-S 2M	E3NX-FA51 2M
E3X-DA41TW-S 5M	E3NX-FA51 5M
E3X-DA51F-S 2M	E3NX-FA41 5M
E3X-DA51R-S 2M	E3NX-FA51 2M
E3X-DA51-S 2M	E3X-HD41 2M
	E3NX-FA51 2M
E3X-DA6AT-S	E3X-HD6
	E3NX-FA7TW
E3X-DA6RM-S	E3NX-FA7
E3X-DA6-S	E3X-HD6
	E3NX-FA6
E3X-DA6SE-S	E3X-HD6
	E3NX-FA6
E3X-DA6TW-S	E3NX-FA7TW
E3X-DA7F-S	E3NX-FA7TW
E3X-DA7R-S	E3NX-FA7TW

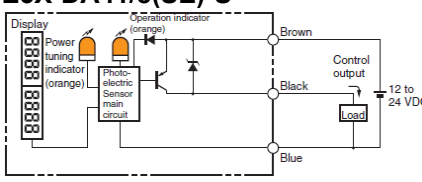
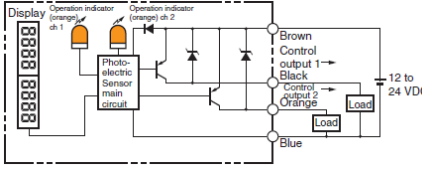
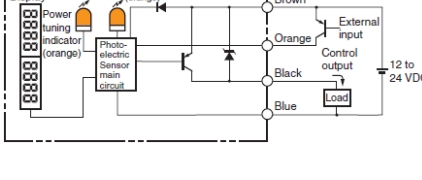
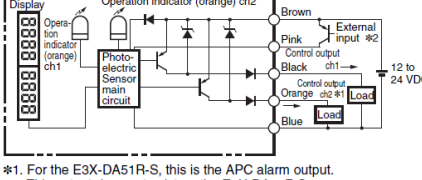
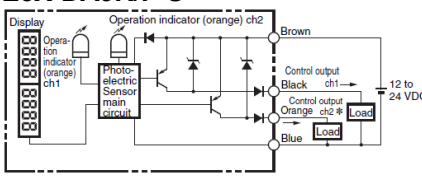
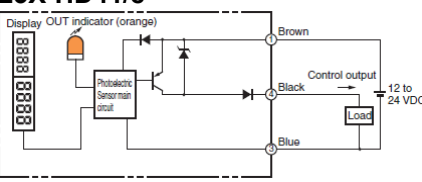
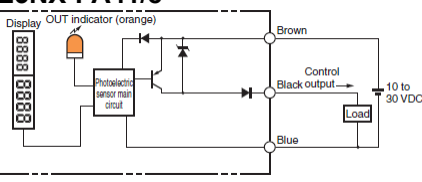
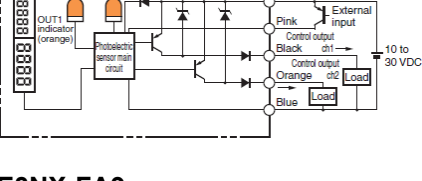
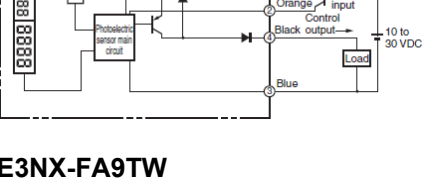
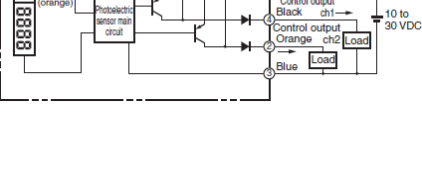
Product discontinuation	Recommended replacement
E3X-DA7-S	E3X-HD6
	E3NX-FA7TW
E3X-DA8AT-S	E3X-HD8
	E3NX-FA9TW
E3X-DA8RM-S	E3NX-FA9
E3X-DA8-S	E3X-HD8
	E3NX-FA8
E3X-DA8SE-S	E3X-HD8
	E3NX-FA8
E3X-DA8TW-S	E3NX-FA9TW
E3X-DA9F-S	E3NX-FA9TW
E3X-DA9R-S	E3NX-FA9TW
E3X-DA9-S	E3X-HD8
	E3NX-FA9TW
E3X-DA11RM-S-15 2M	No recommended replacement
E3X-DA11RM-S-21	No recommended replacement
E3X-DA11-S-25 2M	E3X-HD11 2M
	E3NX-FA11 2M
E3X-DA11-S-3 2M	No recommended replacement
E3X-DA11-S-4 2M	No recommended replacement
E3X-DA11-S-6 2M	E3X-HD11 2M
	E3NX-FA11 2M
E3X-DA11-S-C1 2M	No recommended replacement
E3X-DA11SE-S-C1 2M	No recommended replacement
E3X-DA13-S	No recommended replacement
E3X-DA14-S	E3X-HD14
	E3NX-FA24
E3X-DA21-S-25	E3X-HD11 2M
	E3NX-FA21 2M
E3X-DA21-S-M3J 0.3M	No recommended replacement
E3X-DA41-S-M1J 0.3M	No recommended replacement
E3X-DA41-S-M5J 0.15M	No recommended replacement
E3X-DA43-S	No recommended replacement
E3X-DA44-S	E3X-HD44
	E3NX-FA54
E3X-DA51-S-M1TJ 0.3M	E3X-HD41-M1TJ 0.3M
E3X-DA54-S	E3X-HD14
	E3NX-FA54
E3X-DA6AT-S-11	No recommended replacement
E3X-DA6-S-12	No recommended replacement
E3X-DA6-S-19	E3X-HD6
	E3NX-FA6
E3X-DA6-S-6	No recommended replacement
E3X-DA6TW-S-1	No recommended replacement
E3X-DA11-S-19	E3X-HD11 2M
	E3NX-FA11 2M

[Body color]

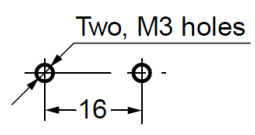
Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
 <p>Sensor: black Cover printing: orange Case side: No printing</p> <p>E3X-DA2/5/7/9[-S]</p>  <p>Sensor: black Cover printing: Gold Case side: White printing</p>	 <p>Sensor: black Cover printing: silver Case side: black name plate with white printing</p>	 <p>Sensor: black Cover printing: silver Case side: black name plate with white printing</p>
<p>Operation panel</p>  <p>7-seg display: red + green Operation button: orange Operation panel printing: white</p>	 <p>7-seg display: green + orange Operation button: black Operation panel printing: white</p>	 <p>7-seg display: green + orange Operation button: black Operation panel printing: white</p>
<p>Cable</p>  <p>Dark grey</p>	 <p>Black</p>	

[Wire connection]

Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
<p>NPN Type E3X-DA11/6(SE)-S</p> <p>E3X-DA11/6TW-S E3X-DA11/6AT-S</p> <p>E3X-DA11/6RM-S</p> <p>E3X-DA21-S E3X-DA21R/F-S</p> <p>*1. For the E3X-DA21R-S, this is the APC alarm output. This output does not exist on the E3X-DA21F-S. *2. This input does not exist the E3X-DA21F-S.</p> <p>E3X-DA7-S E3X-DA7R/F-S</p> <p>* For the E3X-DA7R-S, this is the APC alarm output. This output does not exist on the E3X-DA7F-S.</p>	<p>E3X-HD11/6</p>	<p>E3NX-FA11/6</p> <p>E3NX-FA21</p> <p>E3NX-FA7</p> <p>E3NX-FA7TW</p>

Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
<p>PNP Type E3X-DA41/8(SE)-S</p>  <p>E3X-DA41/8TW-S E3X-DA41/8AT-S</p>  <p>E3X-DA41/8RM-S</p>  <p>E3X-DA51-S E3X-DA51R/F-S</p>  <p>*1. For the E3X-DA51R-S, this is the APC alarm output. This output does not exist on the E3X-DA51F-S. *2. This input does not exist the E3X-DA51F-S.</p> <p>E3X-DA9-S E3X-DA9R/F-S</p> 	<p>E3X-HD41/8</p> 	<p>E3NX-FA41/8</p>  <p>E3NX-FA51</p>  <p>E3NX-FA9</p>  <p>E3NX-FA9TW</p> 

[Mounting dimensions]

Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
<p style="text-align: center;">Mounting Holes</p>  <p style="text-align: center;">Two, M3 holes</p> <p style="text-align: center;">16</p>		

[Dimensions]

<p>Product discontinuation Model E3X-DA-S series</p>	<p>Recommendable replacement 1 Model E3X-HD series</p>	<p>Recommendable replacement 2 Model E3NX-FA series</p>
<p>Pre-wired type</p> <p>Round (○): Power tuning indicator Oblong (◻): Operation indicator for channel 2</p> <p>Operation indicator Main display Sub-display</p> <p>Hole for optical communications</p> <p>Fiber Attachment mounted (E39-F9)</p> <p>Wire-saving connector</p> <p>Round (○): Power tuning indicator Oblong (◻): Operation indicator for channel 2</p> <p>Operation indicator Main display Sub-display</p> <p>Hole for optical communications</p> <p>Fiber Attachment mounted (E39-F9)</p>	<p>Pre-wired type</p> <p>L/D indicator DPC indicator ST indicator</p> <p>OUT indicator Threshold level Incident level</p> <p>Two, 3.2 dia. (mounting holes)</p> <p>Optical communications</p> <p>E39-L143 Mounting Bracket (sold separately, SUS304)</p> <p>Fiber Attachment mounted (E39-F9)</p> <p>Wire-saving connector</p> <p>L/D indicator DPC indicator ST indicator</p> <p>OUT indicator Threshold level Incident level</p> <p>Two, 3.2 dia. (mounting holes)</p> <p>Optical communications</p> <p>Wire-saving Connect (sold separately)</p> <p>E39-L143 Mounting Bracket (sold separately, SUS304)</p> <p>Fiber Attachment mounted (E39-F9)</p>	<p>Pre-wired type</p> <p>L/D indicator DPC indicator ST indicator</p> <p>OUT indicator Threshold level Incident level</p> <p>Two, 3.2 dia. (mounting holes)</p> <p>Optical communications</p> <p>E39-L143 Mounting Bracket (sold separately, SUS304)</p> <p>Fiber Attachment mounted (E39-F9)</p> <p>Wire-saving connector</p> <p>L/D indicator DPC indicator ST indicator</p> <p>OUT indicator Threshold level Incident level</p> <p>Two, 3.2 dia. (mounting holes)</p> <p>Optical communications</p> <p>Wire-saving Connect (sold separately)</p> <p>E39-L143 Mounting Bracket (sold separately, SUS304)</p> <p>Fiber Attachment mounted (E39-F9)</p>

<p>Product discontinuation Model E3X-DA-S series</p>	<p>Recommendable replacement 1 Model E3X-HD series</p>	<p>Recommendable replacement 2 Model E3NX-FA series</p>
<p>E3X-DA0-S</p>	<p>E3X-HD0/FA0</p>	

[Characteristics]
Digital Fiber Amplifier (E3X-DA1/4/6/8[]-S/RM-S/TW-SAT-S/SE-S)

Item		Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
Light source (wavelength)		Red LED (635 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.) * E3X-DA[]RM/TW/AT-S 1080 mW max. (Current consumption: 45 mA max.)	720 mW max. (Current consumption: 30 mA max.)	960mW max. (Current consumption: 40 mA max.)
	Eco mode (Digital display light off)	None	530mW max. (Current consumption: 22 mA max.)	720mW max. (Current consumption: 30 mA max.)
	Eco Lo mode (Luminance change of digital display)	None	640mW max. (Current consumption: 26 mA max.)	840mW max. (Current consumption: 35 mA max.)
Control output		Load power supply voltage: 26.4 V DC max. open-collector output Load current: 50 mA Residual voltage: At load current of less than 50 mA: 1 V max.	Load power supply voltage: 26.4 V DC max.3 open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100 mA max. Groups of more than 4 Amplifier Units: 20 mA max. Residual voltage: At load current of less than 10 mA: 1 V max. At load current of 10 to 100 mA: 2 V max.	Load power supply voltage: 30 V DC max open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100 mA max. Groups of more than 4 Amplifier Units: 20 mA max. Residual voltage: At load current of less than 10 mA: 1 V max. 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	Not Provided	
Response time	Super-high-speed mode	DA[]SE-S	None	
		DA[]-S	Operate: 48 µs, reset: 50 µs	
		DA[]RM-S	Operate/reset: 80 µs	
		DA[]TW-S	Operate/reset: 130 µs	
	High-speed mode	Operate/reset: 250 µs * Except for E3X-DA[]SE-S	Operate/reset: 250 µs	
	Standard mode	Operate/reset: 1 ms * Except for E3X-DA[]SE-S	Operate/reset: 1 ms	
	Giga power mode	None	Operate/reset: 16 ms	
Sensitivity setting		Teaching or manual method		
Functions	Power tuning	Provided		
	Timer	Select from OFF-delay, ON-delay, One-shot	Select from disabled, OFF-delay, ON-delay, One-shot	Select from disabled, OFF-delay, ON-delay, One-shot, ON/OFF-delay
	Automatic power control (APC)	Always enabled		
	Zero-reset	Negative values can be displayed. (Threshold value is shifted.) * Except for E3X-DA[]SE-S		
	Initial-reset	Initial -reset	Select from initial reset/User reset	
	Mutual interference prevention (supported for up to 10 Units)	Provided		
Individual functions	Counter * Only E3X-DA[]RM-S	Switchable between up counter and down counter. Set counter:0 to 9999999	None	
	ATC * Only E3X-DA[]AT-S	Provided	None * Dynamic power control function (DPC) provided	

Item		Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series	
Individual functions	Differential detection * only E3X-DA[RM-S only E3X-DA[TW-S only E3X-DA[AT-S	Provided Switchable between single edge and double edge detection mode Single edge: Can be set to: 250 μs, 500 μs, 1 ms, 10 ms, or 100 ms Double mode: Can be set to 500 μs, 1 ms, 2 ms, 20 ms, or 200 ms	Provided	None	
	I/O setting	DA[RM-S	External input function not provided 2 ch output not provided	Output 1 setting (Select from normal detection mode/area detection mode) Output 2 setting * Only FA21, 51, 7TW, 9TW (Select from normal detection mode/alarm output mode/error detection mode) External input * Only FA21, 51, FA7, FA9, FA24, FA54 (Select from input OFF/tuning, power tuning/emission OFF/zero reset, or bank switching.	
		DA[TW-S			output setting (Select from channel 2 output/area output, or self-diagnosis.)
		DA[AT-S			output setting (Select from channel 2 output/area output/or self-diagnosis, or ATC error output)
Indicator	DA[SE-S	Operation indicator (orange)	Operation indicator (orange) 7-segment digital indicator (sub digital display: green + main digital display: red), L/D indicator (orange), ST indicator (orange), ST indicator (blue), DPC indicator (green), 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)	
	DA[-S DA[RM-S	Operation indicator (orange) power tuning indicator (orange)			
	DA[TW-S DA[AT-S	Operation indicator 1 ch (orange) Operation indicator 2 ch (orange)			
Display timing		Select from incident level + threshold or other 7 patterns	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 * Except for E3X-DA[SE-S			
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 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°C Groups of 3 to 10 Amplifiers: -25 to +50°C Groups of 11 to 16 Amplifiers: -25 to +45°C Groups of 17 to 30 Amplifiers: -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			

Advanced Digital Fiber Amplifier (E3X-DA2/5/7/9[-S/R-S/F-S])

Item		Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
Light source (wavelength)		Red, 4-element LED (625 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 light off)	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: 26.4 V DC max. open-collector output Load current: 50 mA Residual voltage: At load current of less than 50 mA: 1 V max.	Load power supply voltage: 26.4 V DC max. open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100 mA max. Groups of more than 4 Amplifier Units: 20 mA max. Residual voltage: At load current of less than 10 mA: 1 V max. At load current of 10 to 100 mA: 2 V max.	Load power supply voltage: 30 V DC max open-collector output Load current: Groups of 1 to 3 Amplifier Units: 100 mA max. Groups of more than 4 Amplifier Units: 20 mA max. Residual voltage: At load current of less than 10 mA: 1 V max. 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	Provided		
Response time	Super-high-speed mode	DA[-S]	NPN output Operate/reset: 50 µs PNP output Operate/reset: 55 µs	Operate/reset: 1 output type: 30 µs 2 output type: 32 µs
		DA[R-S]		
		DA[F-S]	NPN output Operate: 46 µs, reset: 48 µs PNP output Operate: 51 µs, reset: 53 µs	
	High-speed mode	Operate/reset: 250 µs Except for E3X-DA[F-S]		Operate/reset: 250 µs
	Standard mode	Operate/reset: 1 ms * Except for E3X-DA[F-S]		Operate/reset: 1 ms
	High-resolution mode	Operate/reset: 4 ms * Except for E3X-DA[F-S]		None
	Tough mode	Operate/reset: 16 ms * Except for E3X-DA[F-S]		None
Giga power mode	None		Operate/reset: 16 ms	
Sensitivity setting		Teaching or manual method		
Functions	power tuning	Provided		
	Timer	Select from disabled, OFF-delay, ON-delay, One-shot, ON/OFF-delay	Select from disabled, OFF-delay, ON-delay, One-shot	Select from disabled, OFF-delay, ON-delay, One-shot, ON/OFF-delay
	Automatic power control (APC)	Always enabled		
	Zero-reset	Negative values can be displayed. (Threshold value is shifted.) * Except for E3X-DA[SE-S]		
	Initial-reset	Select from initial reset/User reset		
	Mutual interference prevention (supported for up to 10 Units)	Provided		
	ATC	Provided	None * Dynamic power control function (DPC) provided	

Item		Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
Individual functions	Differential detection * Only for E3X-DA[]-S, DA[]R-S	Provided Switchable between single edge and double edge detection mode Single edge: Can be set to: 250 μs, 500 μs, 1 ms, 10 ms, or 100 ms Double mode: Can be set to 500 μs, 1 ms, 2 ms, 20 ms, or 200 ms	Provided	None
	Slow-motion display * Only for E3X-DA[]F-S	Provided	None	
	APC margin display * Only for E3X-DA[]R-S	Provided	None	
	I/O setting	DA[]-S DA[]R-S	External input (Select from teaching, power tuning, zero reset, light OFF or counter reset.)	External input function not provided 2 ch output not provided
DA[]-S		Output setting Select from output for each channel, area output, or self-diagnosis.		
Indicator	DA[]-S	Operation indicator 1 ch (orange) Operation indicator 2 ch (orange)	Operation indicator(orange) 7-segment digital indicator (sub digital display: green + main digital 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)
	DA[]R-S	Operation indicator (orange) APC alarm indicator (orange)		
	DA[]F-S	Operation indicator 1 ch (orange) power tuning output indicator (orange)		
Display timing		Select from incident level + threshold or other 7 patterns	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		
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 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°C Groups of 3 to 10 Amplifiers: -25 to +50°C Groups of 11 to 16 Amplifiers: -25 to +45°C Groups of 17 to 30 Amplifiers: -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		

Sensor Communications Unit (E3X-DA0-S)

Item		Product discontinuation Model E3X-DA0-S	Recommendable replacement 1 Model E3X-HD0
Light source (wavelength)		Red, 4-element LED (625 nm)	Red, 4-element LED (625 nm)
Power supply voltage		Supplied from the connector through the Sensor Communication Unit	
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.)
	Eco mode (Digital display light off)	600 mW max. (Current consumption: 25 mA max.)	530 mW max. (Current consumption: 22 mA max.)
	Eco Lo mode (Luminance change of digital display)	720 mW max. (Current consumption: 30 mA max.)	None
Control output		None	
Protection circuits	Power supply reverse polarity protection	Provided	
	Output short-circuit protection	Provided	
	Out reverse polarity protection	Provided	None
Response time	Super-high-speed mode	None	
	High-speed mode	Operate/reset: 250 μs	
	Standard mode	Operate/reset: 1 ms	
	High-resolution mode	Operate/reset: 4 ms	None
	Tough mode	Operate/reset: 16 ms	None
	Giga power mode	None	Operate/reset: 16ms
Sensitivity setting		Teaching or manual method	
Maximum connectable Units		with E3X-CRT: 16 units, with E3X-ECT: 30 units	
Functions	power tuning	Provided	
	Timer	Select from disabled, OFF-delay, ON-delay, One-shot, ON/OFF-delay	Select from disabled, OFF-delay, ON-delay, One-shot.
	Automatic power control (APC)	Always enabled	
	Zero-reset	Negative values can be displayed. (Threshold value is shifted.)	
	Initial-reset	Select from initial reset/User reset	
	Mutual interference prevention (supported for up to 10 Units)	Provided	
	ATC	Provided	None * Dynamic power control function (DPC) provided
Individual functions	Differential detection	Switchable between single edge and double edge detection mode Single edge: Can be set to: 250 μs, 500 μs, 1 ms, 10 ms, or 100 ms Double mode: Can be set to: 500 μs, 1 ms, 2 ms, 20 ms, or 200 ms	Provided
	I/O setting	Output setting Select from output for each channel, area output, or self-diagnosis.	External input function not provided. 2 ch output provided.
Display timing		Select from incident level + threshold or other 6 patterns	normal/peak-hold/peak-bottom-hold/percent display/bar display/channel number possible
Display orientation		Switching between normal/reverse possible	
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 2 Amplifiers: 0 to 55°C Groups of 3 to 10 Amplifiers: 0 to 50°C Groups of 11 to 16 Amplifiers: 0 to 45°C Groups of 17 to 30 Amplifiers: 0 to 40°C	
	Storage	-30 to +70°C (with no icing or condensation)	
Weight (Packed state)		Approx.55 g	Approx.65 g
Material	Case	Polybutylene terephthalate (PBT)	Heat-resistant ABS
	Cover	Polycarbonate (PC)	

[Operation ratings]

Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series																																																																																
Sensing distance (E3X-DA[]-S/RM-S/TW-S/AT-S/SE-S) <table border="1"> <thead> <tr> <th rowspan="2">Model</th> <th colspan="4">E3X-DA[]-S</th> </tr> <tr> <th>High-resolution mode</th> <th>Standard mode</th> <th>High-speed mode</th> <th>Super-high-speed mode</th> </tr> </thead> <tbody> <tr> <td>E32-T11R 2M</td> <td>700</td> <td>530</td> <td>350</td> <td>140</td> </tr> <tr> <td>E32-D11R 2M</td> <td>300</td> <td>170</td> <td>120</td> <td>50</td> </tr> </tbody> </table> (E3X-DA[]-S/[]R-S/[]-S/DA0-S) <table border="1"> <thead> <tr> <th rowspan="2">Model</th> <th colspan="5">Sensing distance (mm)</th> </tr> <tr> <th>Tough mode</th> <th>High-resolution mode</th> <th>Standard mode</th> <th>High-speed mode</th> <th>Super-high-speed mode</th> </tr> </thead> <tbody> <tr> <td>E32-T11R 2M</td> <td>2,000</td> <td>1,400</td> <td>1,000</td> <td>700</td> <td>280</td> </tr> <tr> <td>E32-D11R 2M</td> <td>840</td> <td>600</td> <td>350</td> <td>240</td> <td>100</td> </tr> </tbody> </table>	Model	E3X-DA[]-S				High-resolution mode	Standard mode	High-speed mode	Super-high-speed mode	E32-T11R 2M	700	530	350	140	E32-D11R 2M	300	170	120	50	Model	Sensing distance (mm)					Tough mode	High-resolution mode	Standard mode	High-speed mode	Super-high-speed mode	E32-T11R 2M	2,000	1,400	1,000	700	280	E32-D11R 2M	840	600	350	240	100	Sensing distance <table border="1"> <thead> <tr> <th rowspan="2">Model</th> <th colspan="4">Sensing distance (mm)</th> </tr> <tr> <th>Giga mode</th> <th>Standard mode</th> <th>High-speed mode</th> <th>Super-high-speed mode</th> </tr> </thead> <tbody> <tr> <td>E32-T11R 2M</td> <td>2,000</td> <td>1,000</td> <td>700</td> <td>280</td> </tr> <tr> <td>E32-D11R 2M</td> <td>840</td> <td>350</td> <td>240</td> <td>100</td> </tr> </tbody> </table>	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	Sensing distance <table border="1"> <thead> <tr> <th rowspan="2">Model</th> <th colspan="4">Sensing distance (mm)</th> </tr> <tr> <th>Giga mode</th> <th>Standard mode</th> <th>High-speed mode</th> <th>Super-high-speed mode</th> </tr> </thead> <tbody> <tr> <td>E32-T11R 2M</td> <td>3,000</td> <td>1,500</td> <td>1,050</td> <td>280</td> </tr> <tr> <td>E32-D11R 2M</td> <td>1,260</td> <td>520</td> <td>360</td> <td>100</td> </tr> </tbody> </table>	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
Model		E3X-DA[]-S																																																																																
	High-resolution mode	Standard mode	High-speed mode	Super-high-speed mode																																																																														
E32-T11R 2M	700	530	350	140																																																																														
E32-D11R 2M	300	170	120	50																																																																														
Model	Sensing distance (mm)																																																																																	
	Tough mode	High-resolution mode	Standard mode	High-speed mode	Super-high-speed mode																																																																													
E32-T11R 2M	2,000	1,400	1,000	700	280																																																																													
E32-D11R 2M	840	600	350	240	100																																																																													
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																																																																														

[Operation methods]

Product discontinuation Model E3X-DA-S series	Recommendable replacement 1 Model E3X-HD series	Recommendable replacement 2 Model E3NX-FA series
E3X-DA[](RM/AN)-S <p>Main Display (Red) Incident level, function, etc. Sub-Display (Green) Threshold, function settings, etc. Operation Keys Function setting operations Lock lever Locks the fiber unit. Operation Indicator (orange) ON when output is ON. OFF when output is OFF. Power Tuning Indicator ON: Power tuning is set. Mode Selector Use to select SET or RUN mode. Operation Selector Use to switch between Light ON and Dark ON modes.</p>	E3X-HD[] <p>[L/D] Indicator Indicates the setting status: Light-ON (L) or Dark-ON (D). [DPC] Indicator Turns ON when Dynamic Power Control is effective. [S/T] Indicator Turns ON when Smart Tuning is in progress. [OUT] Indicator Turns ON when the output is ON. Threshold Level Green digital display Incident Level Red digital display [MODE] Button Use to switch between Detection Mode and Setting Mode. [TUNE] Button Automatically sets the emitter power and set values. [UP/DOWN] Button Used to fine-tune the threshold or change set values.</p>	E3NX-FA[]11/41/6/8/7/9/24/54 <p>[L/D] Indicator Indicates the setting status: Light-ON or Dark-ON. [DPC] Indicator Turns ON when Dynamic Power Control is effective. [S/T] Indicator Turns ON when Smart Tuning is in progress. [OUT] Indicator Turns ON when the output is ON. Threshold Level Green digital display Incident Level White digital display [MODE] Button Use to switch between Detection Mode and Setting Mode. [TUNE] Button Executes Smart Tuning. [UP/DOWN] Button Used to fine-tune the threshold or change set values.</p>
E3X-DA[](TW/AT)-S <p>Main Display (Red) Incident level, function, etc. Sub-Display (Green) Threshold, function settings, etc. Operation Keys Function setting operations Lock lever Locks the fiber unit. Operation indicator for channel 1 (orange) ON when output is ON. OFF when output is OFF. Operation indicator for channel 2 (orange) ON when output is ON. OFF when output is OFF. Mode Selector Use to select SET or RUN mode. Channel Selector Use to switch between channels 1 and 2.</p>	E3NX-FA21/51/7TW/9TW/54TW/0 <p>[L/D] Indicator Indicates the setting status: Light On or Dark On. [DPC] Indicator Turns On when Dynamic Power Control is effective. [S/T] Indicator Turns On when Smart Tuning is in progress. [OUT] Indicator Turns On when the output is ON. Threshold Level Green digital display Incident Level White digital display [MODE] Button Use to switch between Detection Mode and Setting Mode, and use to switch between OUT1 and OUT2. [TUNE] Button Executes Smart Tuning. [UP/DOWN] Button Used to fine-tune the threshold or change set values.</p>	
E3X-DA[]-S ([]:21/51/7/9/0) <p>Main Display (Red) Incident level, function, etc. Sub-Display (Green) Threshold, function settings, etc. Operation Keys Function setting operations Lock lever Locks the fiber unit. Operation Indicator (ch1) (orange) ON when output is ON. OFF when output is OFF. Operation Indicator (ch2) (orange) ON when output is ON. OFF when output is OFF. Mode Selector Use to select SET or RUN Mode. Channel Selector Use to select the channel to display and set.</p>		
E3X-DA[]R-S ([]:21/51/7/9) <p>Main Display (Red) Incident level, function, etc. Sub-Display (Green) Threshold, function settings, etc. Operation Keys Function setting operations Lock lever Locks the fiber unit. Operation Indicator (orange) ON when output is ON. OFF when output is OFF. APC alarm output indicator (orange) ON when output is ON. OFF when output is OFF. Easy key lock Selector Select to lock or unlock settings. Mode Selector Use to select SET or RUN Mode. Channel Selector Use to select the channel to display and set.</p>		
E3X-DA[]F-S ([]:21/51/7/9) <p>Main Display (Red) Incident level, function, etc. Sub-Display (Green) Threshold, function settings, etc. Operation Keys Function setting operations Lock lever Locks the fiber unit. Operation Indicator (orange) ON when output is ON. OFF when output is OFF. Power tuning indicator (orange) ON when setting is ON. OFF when setting is OFF. Easy key lock Selector Select to lock or unlock settings. Mode Selector Use to select SET or RUN Mode. Channel Selector Use to select the channel to display and set.</p>		

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.