

Easy-teach digital fiber amplifier

E3X-SD

The E3X-SD easy-teach fiber amplifier is the ideal solution for all standard fiber applications. The one-button teaching and/or the simple threshold adjustment with up/down keys and the easy to read display allow an intuitive usage and fast set up.

- easy one-button teaching
- easy to read display and simple threshold adjustment with up/ down keys for intuitive usage
- GIGA RAY LED for high performance and precision



Ordering Information

Shape	Item	Order code	
		NPN output	PNP output
	Pre-wired	E3X-SD21 2M	E3X-SD51 2M
	Fiber amplifier connector*1	E3X-SD7	E3X-SD9

*1. Order connector separately. For M8 connector models see E3X-DA-S.

Amplifier Unit Connectors (sold separately)

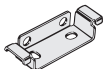
Shape	Type	Comment	Order code
	Fiber amplifier connector	2 m PVC cable	E3X-CN21*1
		30 cm PVC cable with M12 plug connector (4 pin)	E3X-CN21-M1J 0.3M
		30 cm PVC cable with M8 plug connector (4 pin)	E3X-CN21-M3J-2 0.3M

*1. 4-wire version. For 3-wire version order E3X-CN11.

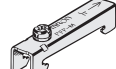
Note: Stickers for Connectors are included as accessories.

Accessories (sold separately)

Mounting Brackets

Appearance	Model	Quantity
	E39-L143	1

End Plate

Appearance	Model	Quantity
	PFP-M	1

Ratings and Specifications

Amplifier Units

Item		E3X-SD□
Light source (wavelength)		Red, 4-element LED (625 nm)
Power supply voltage		12 to 24 VDC $\pm 10\%$, ripple (p-p): 10% max.
Power consumption/ Current consumption		960 mW max. (Power supply voltage: 24 V, Current consumption: 40 mA max.) (Power supply voltage: 12 V, Current consumption: 80 mA max.)
Control output		Open-collector output (NPN or PNP) Load power supply: 26.4 V max., Load current: 50 mA max. (Residual voltage: 1.5 V max.) Light-ON/Dark-ON mode selector
Response time		Operate or reset: 200 μ s max.
Sensitivity adjustment		UP/DOWN direct key setting, teaching with/without a workpiece, automatic teaching
Protection circuits		Power supply reverse polarity protection, output short-circuit protection, output reverse polarity protection
Mutual interference prevention		Up to 5 Amplifiers (optically synchronized) ^{*1}
Ambient illumination		Receiver side Incandescent lamp: 10,000 lux max. Sunlight: 20,000 lux max.
Number of gang-mounted Amplifiers		16 max. (The ambient temperature specification depends on the number of gang-mounted Amplifiers.)
Ambient temperature range		Operating: Groups of 1 to 3 Amplifiers: -25°C to 55°C Groups of 4 to 11 Amplifiers: -25°C to 50°C Groups of 12 to 16 Amplifiers: -25°C to 45°C Storage: -30°C to 70°C (with no icing or condensation)
Ambient humidity range		Operating and storage: 35% to 85% (with no condensation)
Insulation resistance		20 M Ω . min. (at 500 VDC)
Dielectric strength		1,000 VAC at 50/60 Hz for 1 minute
Vibration resistance		Destruction: 10 to 55 Hz with a 1.5-mm double amplitude for 2 hours each in X, Y and Z directions
Shock resistance		Destruction: 500 m/s ² , for 3 times each in X, Y and Z directions
Degree of protection		IEC 60529 IP50 (with Protective Cover attached)
Connection method		Pre-wired (standard cable length: 2 m), or connector
Weight (packed state)		Pre-wired model: Approx. 100 g, Model with connector: Approx. 55 g
Material	Case	Polybutylene terephthalate (PBT)
	Cover	Polycarbonate (PC)
Accessories		Instruction manual

^{*1}. Mutual interference prevention is effective when E3X-SD-series Amplifiers are gang-mounted without other E3X-series Amplifiers.