

Color Fiber Amplifier Unit

E3NX-CA



Smart Fiber Amplifier Units with White LEDs.
High Color Discrimination Capability with the Same
Easy Operation as Previous Fiber Amplifier Units.
Existing General-purpose Fiber Units Can Be
Connected.

- Detects subtle color differences.
The new white LED optic system increases the light intensity and the low-noise circuit in the Smart Fiber Amplifier Unit provides a surprising detection capability.
- Handles glossy workpieces.
Smart Tuning lets you set the optimum sensitivity for detection with one simple operation.
- IoT compatible.
The detected RGB data can be displayed on the Amplifier Unit, and the Amplifier Unit for communications can transfer this data to the host in realtime.



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

Refer to *Safety Precautions* on page 12.

Ordering Information

Fiber Amplifier Units (Refer to *Dimensions* on pages 13 and 14.)

Type	Appearance	Connecting method	Inputs/outputs	Model	
				NPN output	PNP output
Standard models		Pre-wired (2 m)	1 output	E3NX-CA11 2M	E3NX-CA41 2M
		Wire-saving Connector	1 output	E3NX-CA6	E3NX-CA8
Advanced models		Pre-wired (2 m)	2 outputs + 1 input	E3NX-CA21 2M	E3NX-CA51 2M
Model for Sensor Communications Unit *		Connector for Sensor Communications Unit	---	E3NX-CA0	

* A Sensor Communications Unit is required if you want to use the Fiber Amplifier Unit on a network.

Note: Refer to your OMRON website for details on models with wire-saving connectors.

Fiber Units (Refer to *Dimensions* on page 14.)

Sensing method	Appearance	Sensing direction	Size	Model
Reflective		Right-angle	M6	E32-C91N 2M
Through-beam (Grooved type)		Array	10 mm	E32-G16 2M

Note: Refer to *Fiber Units* on your OMRON website or to the *Fiber Sensor Best Selection Catalog* (Cat. No. E418-E1) for details on Fiber Units.

Accessories (Sold Separately)

Wire-saving Connectors (Required for models for Wire-saving Connectors.) (Refer to Dimensions on page 15.)

Connectors are not provided with the Fiber Amplifier Unit and must be ordered separately. *Protective stickers are provided.

Type	Appearance	Cable length	No. of conductors	Model	Applicable Fiber Amplifier Units
Master Connector		2 m	3	E3X-CN11	E3NX-CA6 E3NX-CA8
Slave Connector			1	E3X-CN12	

Note: Models are also available with a 5-m cable. The model names have the suffix 5M. Ask your OMRON representative for delivery times.

Mounting Bracket (Refer to Dimensions on page 15.)

A Mounting Bracket is not provided with the Fiber Amplifier Unit. It must be ordered separately as required.

Appearance	Model	Quantity
	E39-L143	1

DIN Tracks (Refer to Dimensions on page 16.)

A DIN Track is not provided with the Fiber Amplifier Unit. It must be ordered separately as required.

Appearance	Type	Model	Quantity
	Shallow type, total length: 1 m	PFP-100N	1
	Shallow type, total length: 0.5 m	PFP-50N	
	Deep type, total length: 1 m	PFP-100N2	

Note: Refer to PFP-□ on your OMRON website for details.

End Plate (Refer to Dimensions on page 16.)

Two End Plates are provided with the Sensor Communications Unit.

End Plates are not provided with the Fiber Amplifier Unit. They must be ordered separately as required.

Appearance	Model	Quantity
	PFP-M	1

Note: Refer to PFP-M on your OMRON website for details.

Related Products

Sensor Communications Units

Type	Appearance	Model
Sensor Communications Unit for EtherCAT		E3NW-ECT
Distributed Sensor Unit *		E3NW-DS

Note: Refer to your OMRON website for details.

* The Distributed Sensor Unit can be connected to any of the Sensor Communications Units.

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