

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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