

# Ultracompact, Ultrathin Photoelectric Sensor with Built-in Amplifier

## E3T

### The Improved E3T Series with Easier, Smoother Mounting and Installation

- The series includes Through-beam, Long-distance (2 m) Sensors (E3T-ST3□).
- Easy installation with M3-mounting Sensors (E3T-ST□□M, E3T-FD□□M, and E3T-SL□□M).
- Small Cylindrical Sensors for one-point mounting are also available (E3T-C□□□(S)).
- Infrared Sensors added to the Series (E3T-□T□□(M)F).

CE



Be sure to read *Safety Precautions* on page 15.

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

### Lineup Overview

| Appearance       |                                                                                                  | Sensing method | Through-beam | Retro-reflective | Diffuse-reflective | Limited-reflective | BGS-reflective |
|------------------|--------------------------------------------------------------------------------------------------|----------------|--------------|------------------|--------------------|--------------------|----------------|
| Rectangular type | Side-view<br> | M2-mounting    | ●            | ●                | ---                | ●                  | ---            |
|                  |                                                                                                  | M3-mounting    | ●            | ---              | ---                | ●                  | ---            |
|                  | Flat<br>      | M2-mounting    | ●            | ---              | ●                  | ---                | ●              |
|                  |                                                                                                  | M3-mounting    | ---          | ---              | ●                  | ---                | ---            |
| Cylindrical type | Top-view<br>  | ---            | ●            | ---              | ●                  | ---                | ---            |
|                  | Side-view<br> | ---            | ●            | ---              | ---                | ---                | ---            |

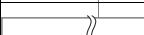
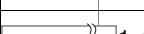
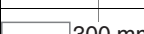
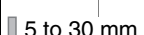
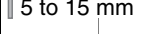
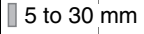
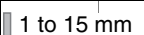
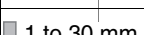
## Ordering Information

Sensors [Refer to Dimensions on page 16.]

 Red light
  Infrared light

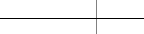
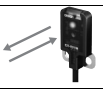
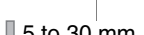
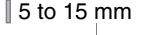
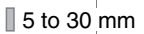
## M2-mounting Sensors

A set of mounting screws is included with the Sensor.

| Sensing method                         | Appearance                                                                          | Sensing distance                                                                               | Operation mode | Model         |               |
|----------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|---------------|---------------|
|                                        |                                                                                     |                                                                                                |                | NPN output    | PNP output    |
| Through-beam<br>(Emitter + Receiver)*1 |    |  2 m          | Light-ON       | E3T-ST31 2M   | E3T-ST33 2M   |
|                                        |                                                                                     | (Sensitivity Adjustment Unit can be used.)                                                     | Dark-ON        | E3T-ST32 2M   | E3T-ST34 2M   |
|                                        |                                                                                     |  1 m          | Light-ON       | E3T-ST11 2M   | E3T-ST13 2M   |
|                                        |                                                                                     | (Sensitivity Adjustment Unit can be used.)                                                     | Dark-ON        | E3T-ST12 2M   | E3T-ST14 2M   |
|                                        |                                                                                     |  300 mm       | Light-ON       | E3T-ST21 2M   | E3T-ST23 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST22 2M   | E3T-ST24 2M   |
|                                        |                                                                                     |  2 m          | Light-ON       | E3T-ST31F 2M  | E3T-ST33F 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST32F 2M  | E3T-ST34F 2M  |
|                                        |    |  1 m          | Light-ON       | E3T-ST11F 2M  | E3T-ST13F 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST12F 2M  | E3T-ST14F 2M  |
|                                        |                                                                                     |  300 mm       | Light-ON       | E3T-ST21F 2M  | E3T-ST23F 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST22F 2M  | E3T-ST24F 2M  |
|                                        |                                                                                     |  500 mm       | Light-ON       | E3T-ST11 2M   | E3T-ST13 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST12 2M   | E3T-ST14 2M   |
|                                        |                                                                                     |  300 mm       | Light-ON       | E3T-ST21 2M   | E3T-ST23 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST22 2M   | E3T-ST24 2M   |
| Retro-reflective                       |   | Using the E39-R4 Reflector, provided 200 mm [30 mm]*2                                          | Light-ON       | E3T-SR41 2M*3 | E3T-SR43 2M*3 |
|                                        |                                                                                     | Using the E39-R37-CA 100 mm [10 mm]*2                                                          | Dark-ON        | E3T-SR42 2M*3 | E3T-SR44 2M*3 |
| Diffuse-reflective                     |  |  5 to 30 mm | Light-ON       | E3T-FD11 2M   | E3T-FD13 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-FD12 2M   | E3T-FD14 2M   |
| Limited-reflective                     |  |  5 to 15 mm | Light-ON       | E3T-SL11 2M   | E3T-SL13 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-SL12 2M   | E3T-SL14 2M   |
|                                        |                                                                                     |  5 to 30 mm | Light-ON       | E3T-SL21 2M   | E3T-SL23 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-SL22 2M   | E3T-SL24 2M   |
| BGS-reflective                         |  |  1 to 15 mm | Light-ON       | E3T-FL11 2M   | E3T-FL13 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-FL12 2M   | E3T-FL14 2M   |
|                                        |                                                                                     |  1 to 30 mm | Light-ON       | E3T-FL21 2M   | E3T-FL23 2M   |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-FL22 2M   | E3T-FL24 2M   |

## M3-mounting Sensors

A set of mounting screws is not included with the Sensor. Order a Screw Set separately if required.

| Sensing method                         | Appearance                                                                          | Sensing distance                                                                               | Operation mode | Model         |               |
|----------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------|---------------|---------------|
|                                        |                                                                                     |                                                                                                |                | NPN output    | PNP output    |
| Through-beam<br>(Emitter + Receiver)*1 |  |  1 m        | Light-ON       | E3T-ST11M 2M  | E3T-ST13M 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST12M 2M  | E3T-ST14M 2M  |
|                                        |                                                                                     |  300 mm     | Light-ON       | E3T-ST21M 2M  | E3T-ST23M 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST22M 2M  | E3T-ST24M 2M  |
|                                        |                                                                                     |  1 m        | Light-ON       | E3T-ST11MF 2M | E3T-ST13MF 2M |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST12MF 2M | E3T-ST14MF 2M |
|                                        |                                                                                     |  300 mm     | Light-ON       | E3T-ST21MF 2M | E3T-ST23MF 2M |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-ST22MF 2M | E3T-ST24MF 2M |
| Diffuse-reflective                     |  |  5 to 30 mm | Light-ON       | E3T-FD11M 2M  | E3T-FD13M 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-FD12M 2M  | E3T-FD14M 2M  |
| Limited-reflective                     |  |  5 to 15 mm | Light-ON       | E3T-SL11M 2M  | E3T-SL13M 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-SL12M 2M  | E3T-SL14M 2M  |
|                                        |                                                                                     |  5 to 30 mm | Light-ON       | E3T-SL21M 2M  | E3T-SL23M 2M  |
|                                        |                                                                                     |                                                                                                | Dark-ON        | E3T-SL22M 2M  | E3T-SL24M 2M  |

\*1. The model number of the Emitter is expressed by adding an "L" to the set model number in the table. Example: E3T-ST11-L 2M  
 The model number of the Receiver is expressed by adding a "D" to the set model number in the table. Example: E3T-ST11-D 2M

\*2. Values in parentheses indicate the minimum required distance between the Sensor and Reflector.

\*3. Models are available either with or without the E39-R37-CA Reflector included.

Models with E39-R37-CA Reflector: E3T-SR4□-S

Models without Reflector: E3T-SR4□-C