

## IO-Link Makes Sensor Level Information Visible and Solves the Three Major Issues at Manufacturing Sites! Standard Photoelectric Sensor.



- Downtime can be reduced.  
Notifies you of faulty parts and such phenomena in the Sensor in real time.
- The frequency of sudden failure can be decreased.  
The light incident level monitor prevents false detection before it happens.
- The efficiency of changeover can be improved.  
The batch check for individual sensor IDs significantly decreases commissioning time.
- Three types of sensing methods and three types of connection methods are available.



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

Be sure to read *Safety Precautions* on page 9.

## Ordering Information

### IO-Link Model / Sensors [Refer to *Dimensions* on page 10.]

Red light Infrared light

Sensing method	Appearance	Connection method	Sensing distance			IO-Link baud rate	Model						
							PNP						
Through-beam (Emitter + Receiver) *3		Pre-wired (2 m)		15 m		COM2 (38.4 kbps)	<b>E3Z-T81-IL2 2M</b> Emitter E3Z-T81-L-IL2 2M Receiver E3Z-T81-D-IL2 2M						
		Pre-wired M12 connector					<b>E3Z-T81-M1TJ-IL2 0.3M</b> Emitter E3Z-T81-L-M1TJ-IL2 0.3M Receiver E3Z-T81-D-M1TJ-IL2 0.3M						
		Standard M8 connector					<b>E3Z-T86-IL2</b> Emitter E3Z-T86-L-IL2 Receiver E3Z-T86-D-IL2						
		Pre-wired (2 m)					COM3 (230.4 kbps)	<b>E3Z-T81-IL3 2M</b> Emitter E3Z-T81-L-IL3 2M Receiver E3Z-T81-D-IL3 2M					
		Pre-wired M12 connector						<b>E3Z-T81-M1TJ-IL3 0.3M</b> Emitter E3Z-T81-L-M1TJ-IL3 0.3M Receiver E3Z-T81-D-M1TJ-IL3 0.3M					
		Standard M8 connector						<b>E3Z-T86-IL3</b> Emitter E3Z-T86-L-IL3 Receiver E3Z-T86-D-IL3					
		Retro-reflective with MSR function							Pre-wired (2 m)		4 m (100 mm) <small>(When using E39-R1S)</small>	COM2 (38.4 kbps)	<b>E3Z-R81-IL2 2M</b>
									Pre-wired M12 connector				<b>E3Z-R81-M1TJ-IL2 0.3M</b>
									Standard M8 connector				<b>E3Z-R86-IL2</b>
Pre-wired (2 m)	COM3 (230.4 kbps)		<b>E3Z-R81-IL3 2M</b>										
Pre-wired M12 connector			<b>E3Z-R81-M1TJ-IL3 0.3M</b>										
Standard M8 connector		<b>E3Z-R86-IL3</b>											




**Note:** Please contact your OMRON sales representative regarding the IO-Link setup file (IODD file).

\*1. The Reflector is sold separately. Select the Reflector model most suited to the application.

\*2. The sensing distance specified is possible when the E39-R1S is used. Values in parentheses indicate the minimum required distance between the Sensor and Reflector.

\*3. Through-beam Sensors are normally sold in sets that include both the Emitter and Receiver.

 Red light
  Infrared light

Sensing method	Appearance	Connection method	Sensing distance			IO-Link baud rate	Model	
							PNP	
Diffuse-reflective		Pre-wired (2 m)		1 m		COM2 (38.4 kbps)	E3Z-D82-IL2 2M	
		Pre-wired M12 connector					E3Z-D82-M1TJ-IL2 0.3M	
		Standard M8 connector					E3Z-D87-IL2	
		Pre-wired (2 m)					E3Z-D82-IL3 2M	
		Pre-wired M12 connector					E3Z-D82-M1TJ-IL3 0.3M	
		Standard M8 connector					E3Z-D87-IL3	
		Pre-wired (2 m)		90 mm (narrow beam)		COM2 (38.4 kbps)	E3Z-L81-IL2 2M	
		Pre-wired M12 connector					E3Z-L81-M1TJ-IL2 0.3M	
		Standard M8 connector					E3Z-L86-IL2	
		Pre-wired (2 m)					COM3 (230.4 kbps)	E3Z-L81-IL3 2M
		Pre-wired M12 connector						E3Z-L81-M1TJ-IL3 0.3M
		Standard M8 connector						E3Z-L86-IL3

**Note:** Please contact your OMRON sales representative regarding the IO-Link setup file (IODD file).

### Accessories (Sold Separately)

**Slit** (A Slit is not provided with Through-beam Sensors) Order a Slit separately if required.

Slit width	Sensing distance	Minimum detectable object (Reference value)	Model	Contents
	E3Z-T□□			
0.5-mm dia.	50 mm	0.2-mm dia.	E39-S65A	One set (contains Slits for both the Emitter and Receiver)
1-mm dia.	200 mm	0.4-mm dia.	E39-S65B	
2-mm dia.	800 mm	0.7-mm dia.	E39-S65C	
0.5 × 10 mm	1 m	0.2-mm dia.	E39-S65D	
1 × 10 mm	2.2 m	0.5-mm dia.	E39-S65E	
2 × 10 mm	5 m	0.8-mm dia.	E39-S65F	

**Reflectors** (Reflector required for Retroreflective Sensors) A Reflector is not provided with the Sensor. Be sure to order a Reflector separately.

Name	Sensing distance *		Model	Quantity	Remarks
	E3Z-R				
	Rated value	Reference value			
Reflector	3 m (100 mm)	---	E39-R1	1	<ul style="list-style-type: none"> <li>Reflectors are not provided with Retro-reflective models.</li> <li>The MSR function of the E3Z-R□ is enabled.</li> </ul>
	4 m (100 mm)	---	E39-R1S	1	
	---	5 m (100 mm)	E39-R2	1	
	---	2.5 m (100 mm)	E39-R9	1	
	---	3.5 m (100 mm)	E39-R10	1	
Fog Preventive Coating	---	3 m (100 mm)	E39-R1K	1	
Small Reflector	---	1.5 m (50 mm)	E39-R3	1	
Tape Reflector	---	700 mm (150 mm)	E39-RS1	1	
	---	1.1 m (150 mm)	E39-RS2	1	
	---	1.4 m (150 mm)	E39-RS3	1	

**Note:** 1. If you use the Reflector at any distance other than the rated distance, make sure that the stability indicator lights properly when you install the Sensor.

2. Refer to *Reflectors on E39-L/E39-S/E39-R* on your OMRON website for details.

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