

# OMRON solution GUIDE

## AS/RS Shuttle Positioning

Detect positioning of AS/RS shuttle between aisle and rows or level of vertical crane.



### Key Features

- E3AS-F TOF detection is unaffected by color or reflectivity of painted steel, colored totes or pallets.
- Compact body available in stainless steel or plastic body
- Dust tight with IP67, IP67K, IP67G rating & antifouling coating on lens
- Available in sensing ranges of 1000 mm and 1500 mm
- IO-Link compatibility – teach sensor on the fly, enable timer function, continuous monitoring of detection levels, and control output logic.

### Challenges:

- Wear and tear on wheel leads to issues for traditional encoder solution requiring frequent recalibration or positioning mistakes.
- Limited space on shuttle to mount positioning sensor or requiring a reflector alignment.
- Extremely dusty environment causing sensor to provide incorrect sensor positioning, frequent need for cleaning.

### Why E3AS-F for AS/RS Shuttle Positioning?

- E3AS-F provides continuous positioning of shuttle with a resolution down to 1 mm over IO-link OR dual discrete outputs for fixed locations.
- E3AS-F small footprint allows sensor to be mounted in narrow areas, away from locations susceptible to wear and tear
- E3AS-F includes an antifouling coating on lens to reduce frequency of cleaning due to build up-- keeps operation running for longer

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Part Number	Descriptions
<a href="#">E3AS-F1500IMN-M1TJ 0.3M</a>	Stainless Steel, 1500 mm, NPN, M12 Pigtail Smartclick connector
<a href="#">E3AS-F1500IMD-M1TJ 0.3M</a>	Stainless Steel, 1500 mm, PNP IO-Link, M12 Pigtail Smartclick connector
<a href="#">E3AS-F1000IPN M3</a>	Plastic, 1000 mm, NPN, M8 4-pin connector
<a href="#">E3AS-F1000IPD 2M</a>	Plastic, 1000 mm, PNP IO-Link, 2 m cable
<a href="#">XS3F-M8PVC4A2M</a>	PVC, M8 4-pin 2 m cable
<a href="#">XS5F-D421-D80-F</a>	PVC Fire-retardant, IP 67, M12 Smartclick Connector, 2 m
<a href="#">E39-L202</a>	Horizontal Protective Cover Bracket, stainless steel