

E3AS-HF

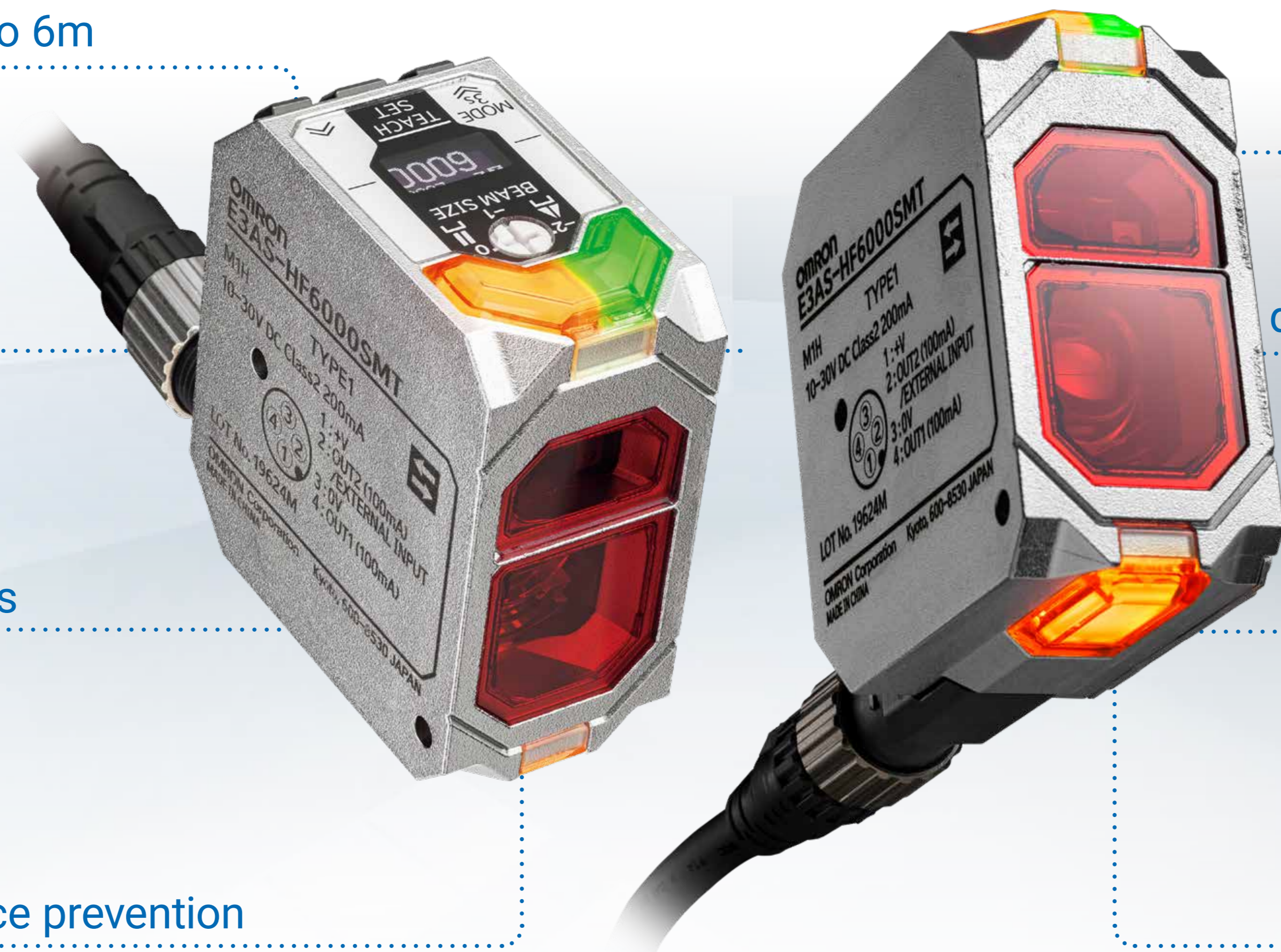
Long-range Time-of-Flight sensor

Long range, from 50mm up to 6m

Multilanguage OLED display

Fast response time up to 2ms

Automatic mutual interference prevention



Best performance by unique algorithm and angle characteristic ($\pm 85^\circ$)

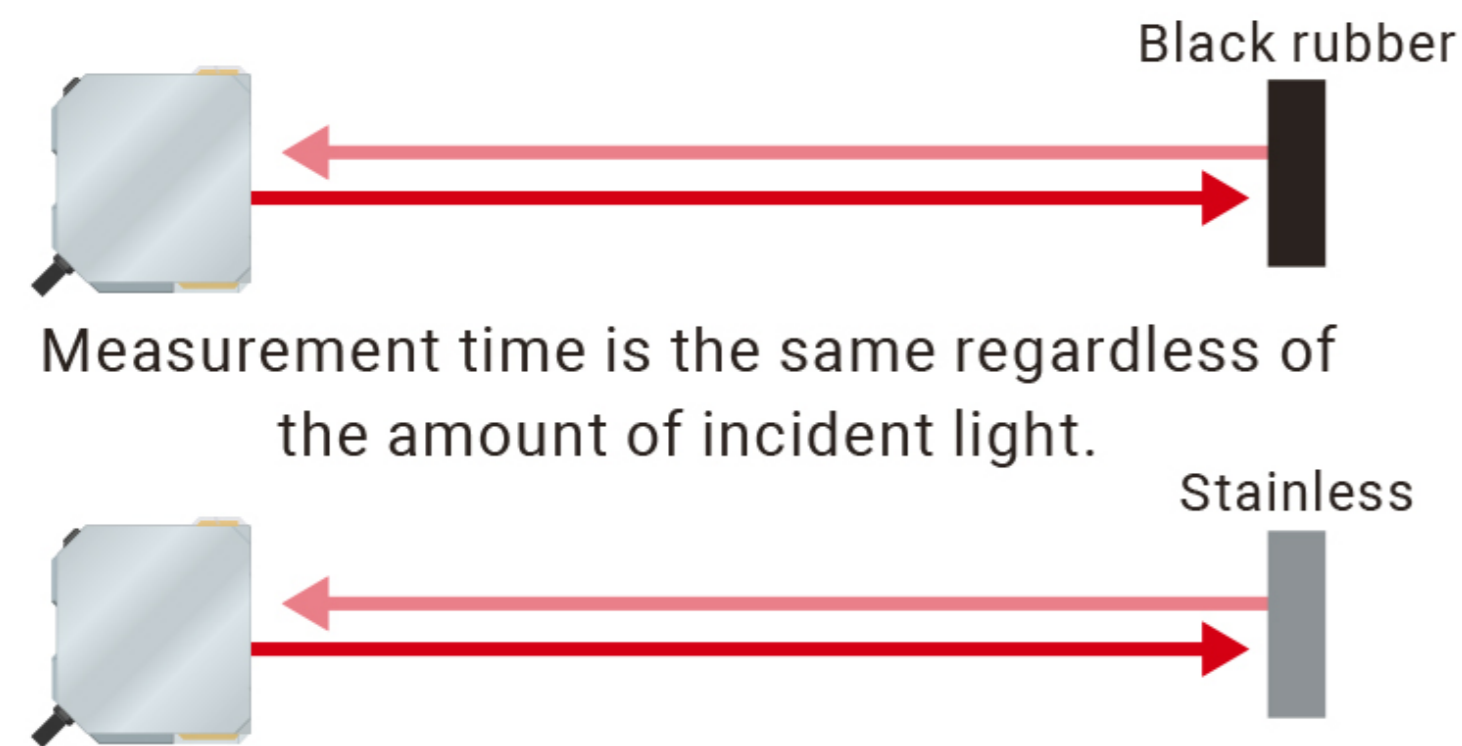
Programmable IO: digital input, output, monitor (mA) or IO-link

Robust IP67/IP69K housing with Ecolab certification

Safe use, Laser class 1

E3AS-HF Long-range Time-of-Flight sensor

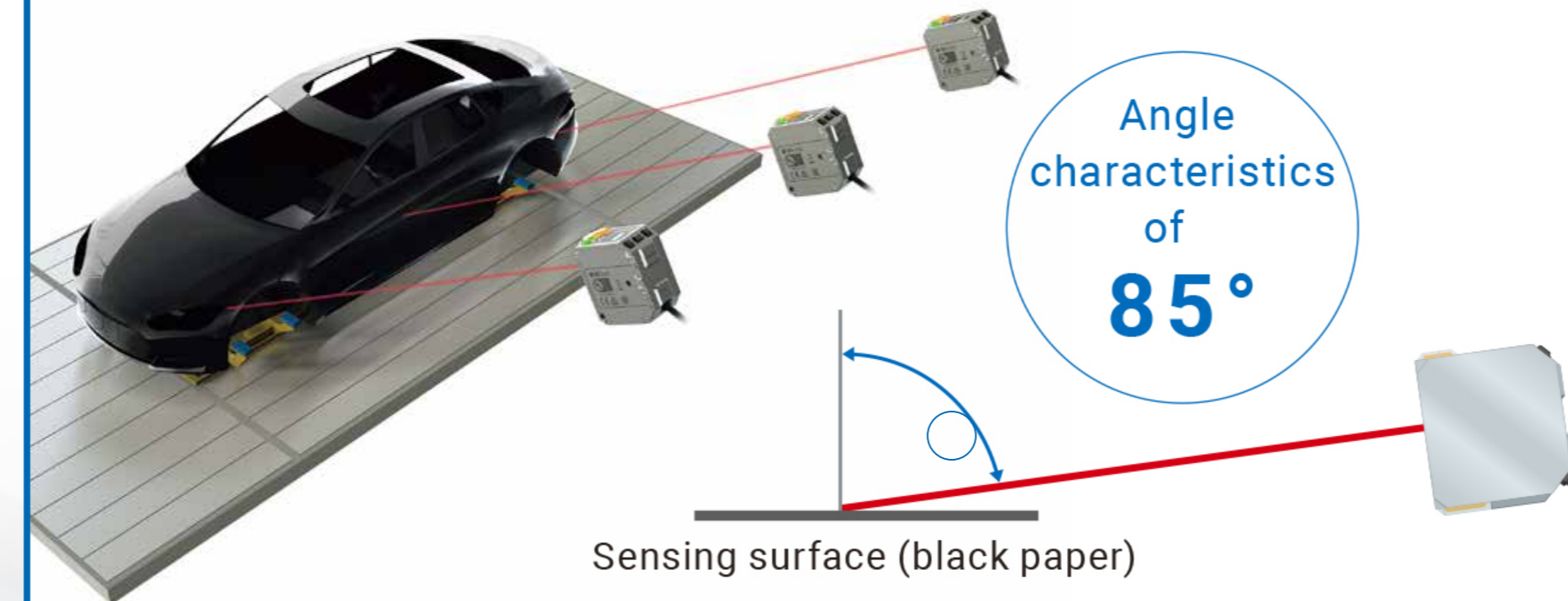
Long range with excellence performance



Measurement time is the same regardless of the amount of incident light.

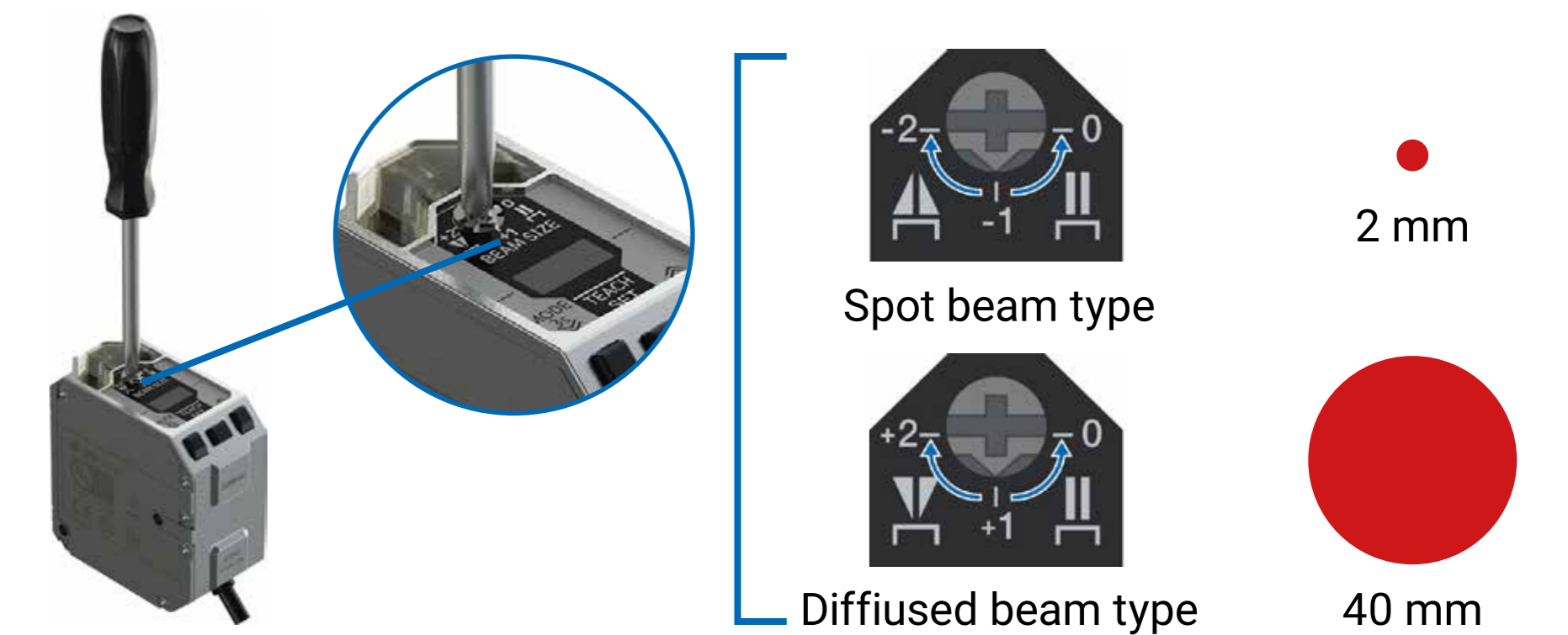
Time-of-Flight provides long-distance detection not affected by colour. **E3AS-HF** achieves high detection performance through OMRON's unique ultra-fast sampling and accumulated processing.

Unique angle characteristic



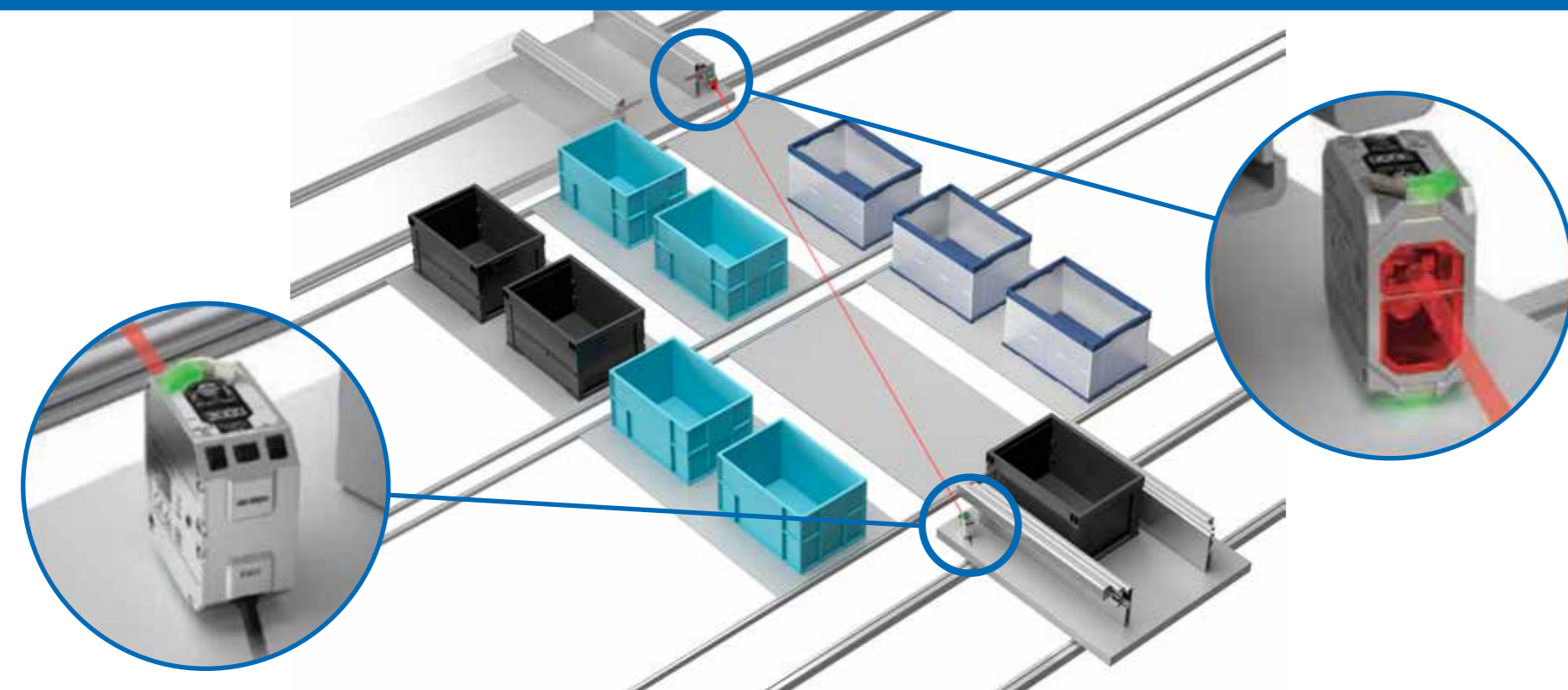
Thanks to unique angle characteristic, **E3AS-HF** performs reliable detection even when installed at angle in a far place or when detecting glossy workpieces with a low-reflective colour.

Adjustable spot diameter



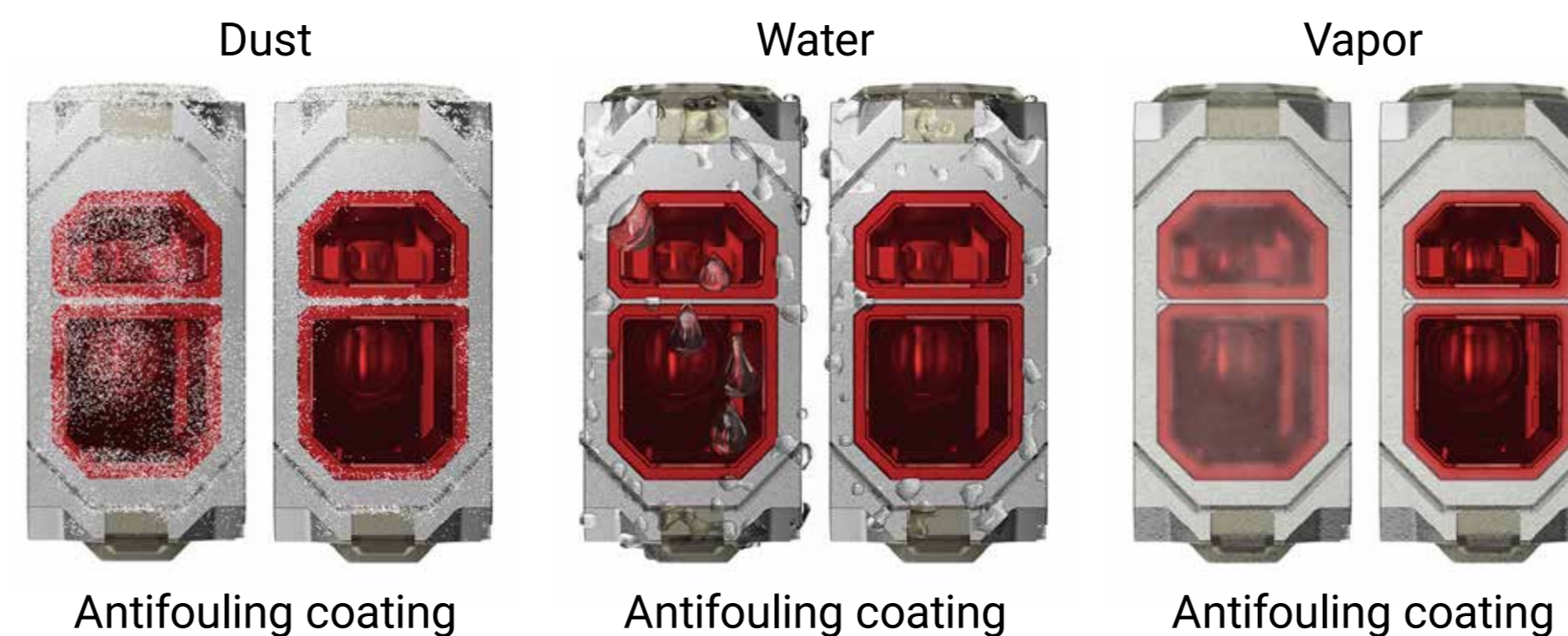
With the dial on the top of the sensor can be selected from three options according to whether it is need to detect. Small spot on a workpiece such as a pin or area detection on a surface with holes.

Automatic mutual interference prevention



E3AS-HF prevent interference between sensors automatically, avoiding the sensors placed to face each other from mutual interference, reducing equipment disruptions.

Antifouling coating in sensing surface



E3AS-HF is equipped with antifouling coating on the sensing surface which prevents liquid droplets and dust from sticking to the sensing surface and keeps the lens from fogging as well.

Environmentally-resistant

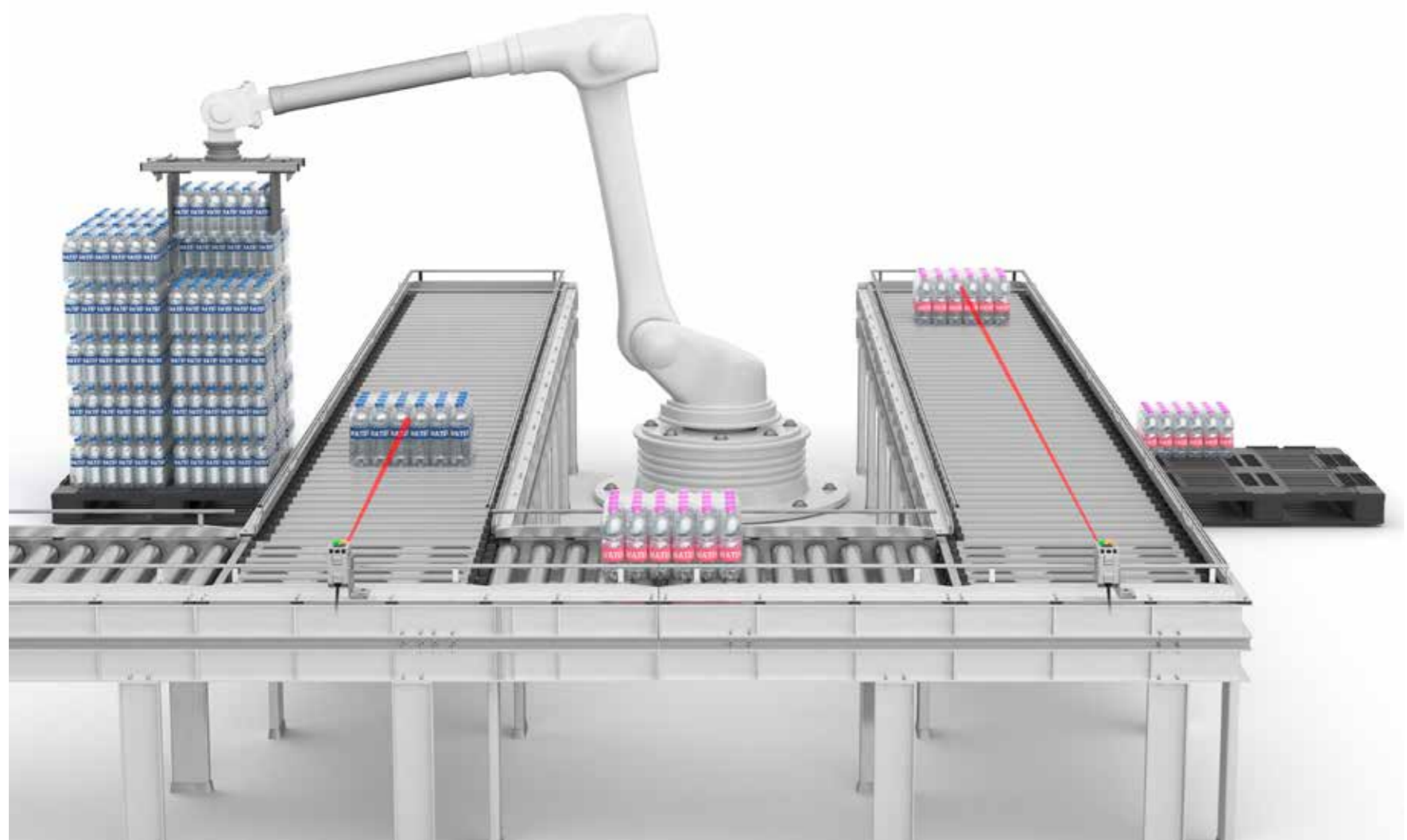
- IP67G**
Water resistance / oil resistance
- IP69K**
High temperatures / high water pressure
- ECOLAB**
Detergent resistance



Light, compact and robust aluminium die-cast housing, highly resistant to water, oil, and high-pressure washing. Ecolab certified and operable at an ambient temperature of -30°C.

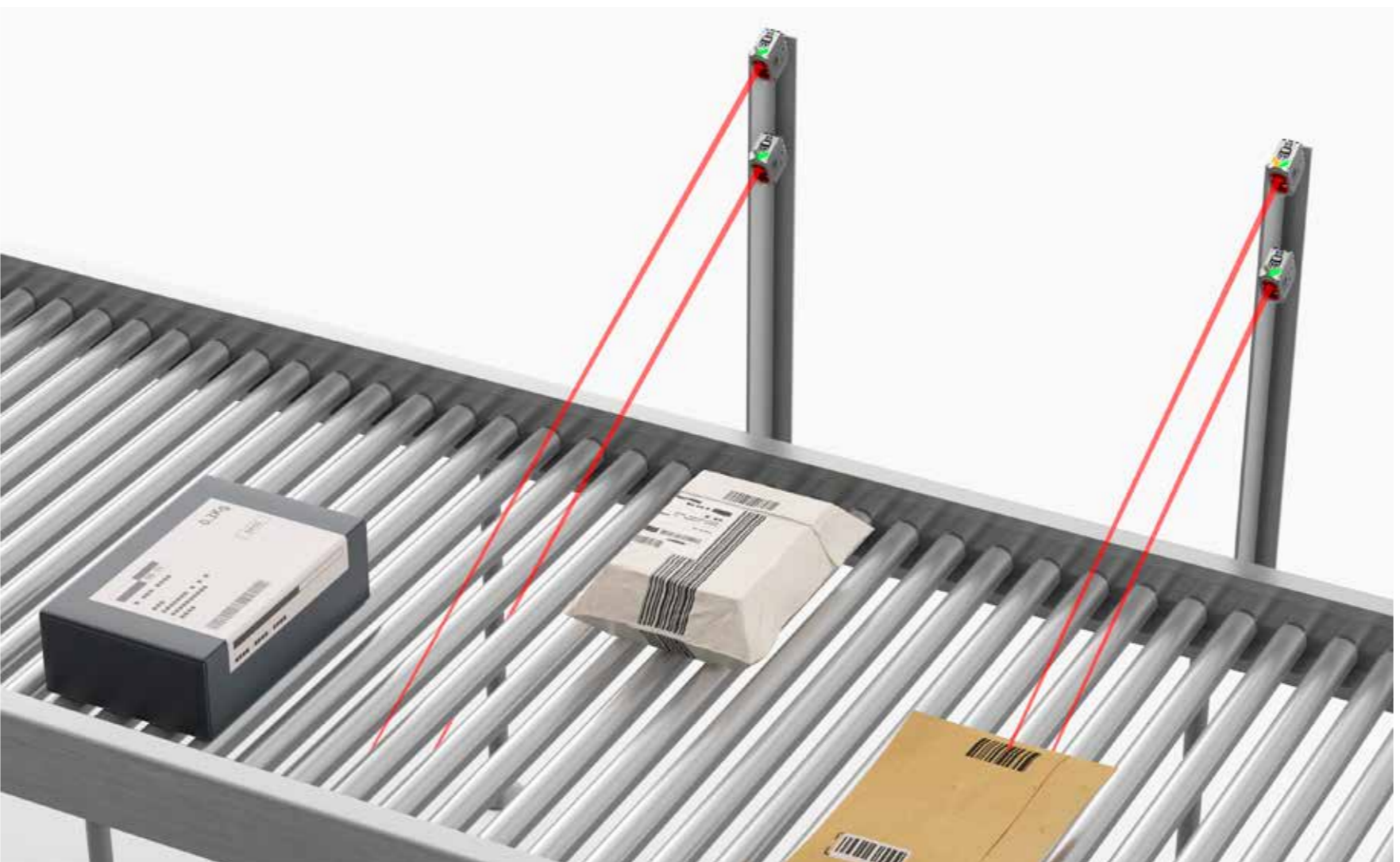
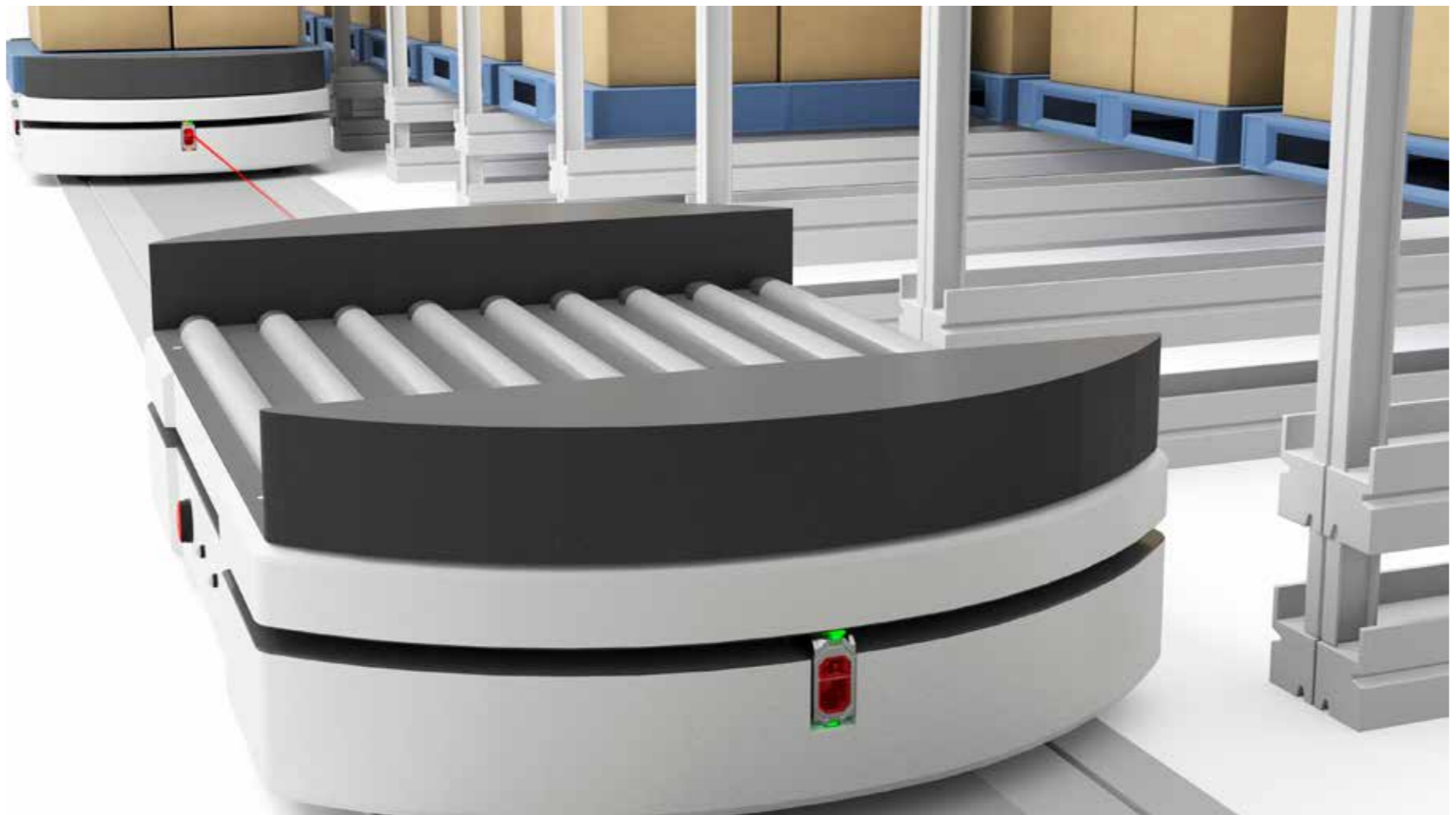
Application areas

Food and Commodities



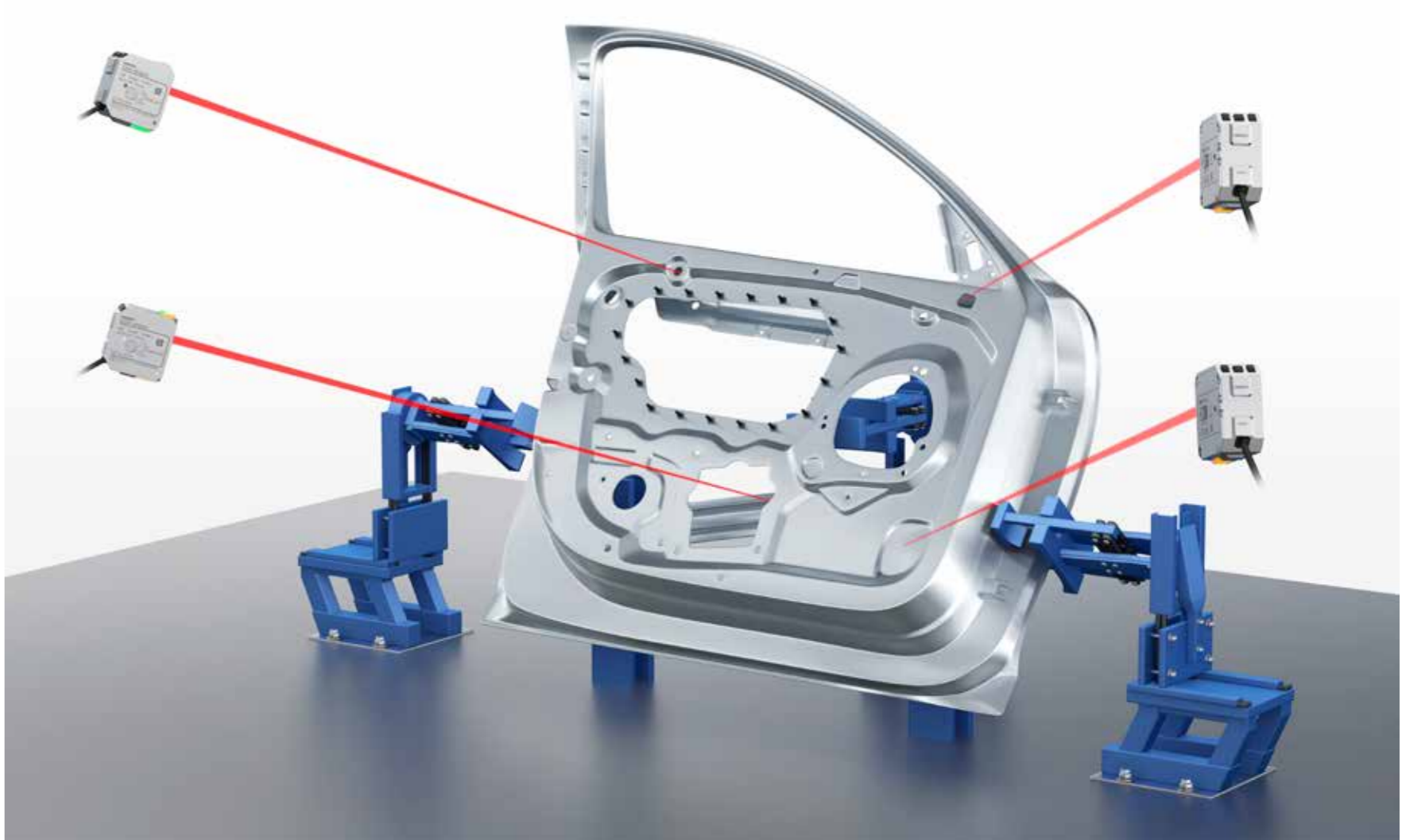
Accurate and stable detection for any type of package, including shrink-wrapped pack and curved objects. Long range detection in palletizing applications.

Logistics



Sensing an obstacle in the AGV's path. Detecting different objects on a roller conveyor. Sensing pallets in an automated warehouse.

Environmental Mobility



Long distance reliable and accurate detection for glossy workpieces or low-reflective colour, even with curved or irregular shape.

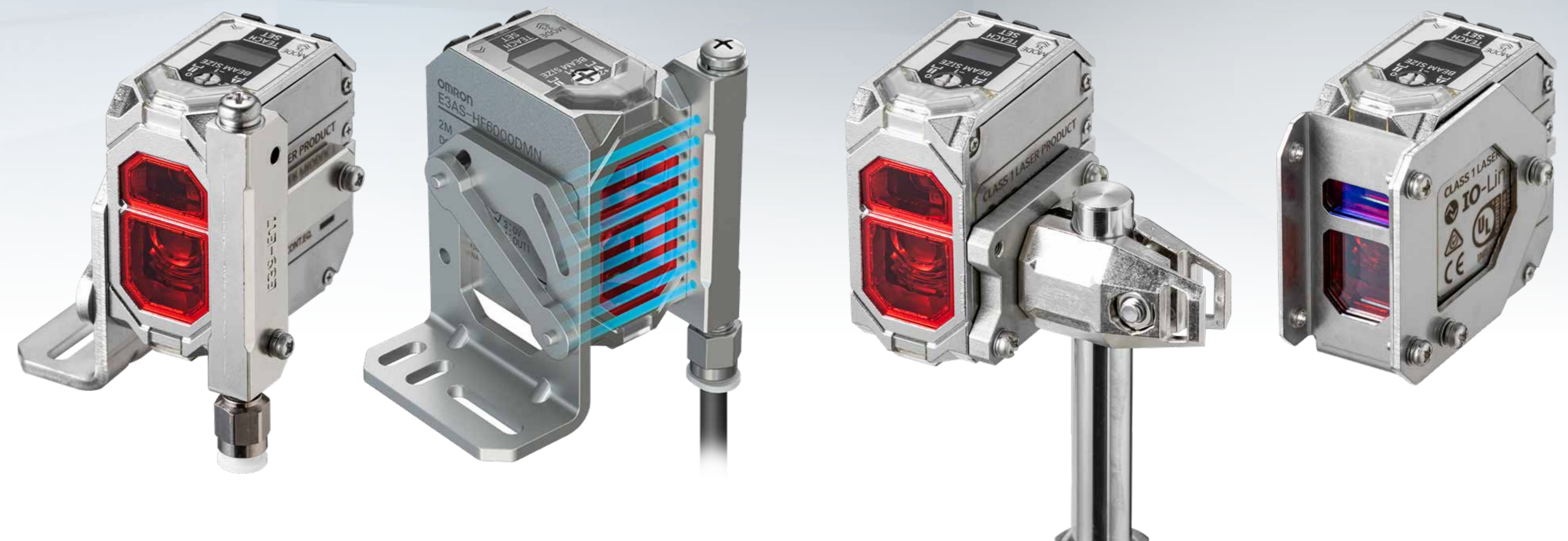
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Additional features



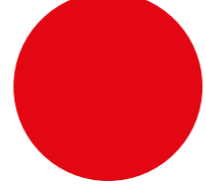


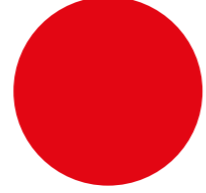


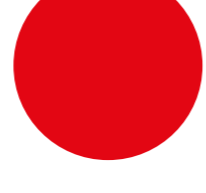


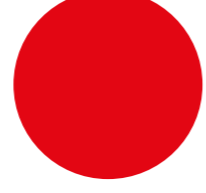
- Flexible design thanks to long range & stable detection for any object
- High reliable detection, not affected by colour, shape or material
- Orientable & configurable OLED display
- Easy setup with responsive buttons
- Additional high-brightness indicator at the bottom for easy visualization from any direction
- High resistance against ambient illumination, up to 100.000 lx, preventing malfunctions caused by camera lights or sunlight
- Antifouling coatings reduce the cleaning frequency on the sensing surface
- Increasing digitalization thanks to IO-link communication
- IO-Link reduces the time required for start-ups, changeovers and maintenance
- UL/CSA Certification

Smart accessories

- Air blow accessory for easy maintenance
- Flexible mounting bracket for any installation
- Additional protection with front cover



E3AS-HF Long-range Time-of-Flight sensor

Connection type	Product name	Spot type	Product description	Stock
	E3AS-HF6000SMT-M1TJ 0.3M	Spot Beam  2 mm	Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, PNP, IO-Link, M12 pigtail connector 0.3m	Yes !
	E3AS-HF6000SMN-M1TJ 0.3M		Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, NPN, M12 pigtail connector 0.3m	Yes !
	E3AS-HF6000DMT-M1TJ 0.3M	Diffuse Beam  40 mm	Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, PNP, IO-Link, M12 pigtail connector 0.3m	Yes !
	E3AS-HF6000DMN-M1TJ 0.3M		Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, NPN, M12 pigtail connector 0.3m	Yes !
	E3AS-HF6000SMT M1H	Spot Beam  2 mm	Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, PNP, IO-Link, M12 horizontal connector	Yes !
	E3AS-HF6000SMN M1H		Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, NPN, M12 horizontal connector	No
	E3AS-HF6000DMT M1H	Diffuse Beam  40 mm	Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, PNP, IO-Link, M12 horizontal connector	Yes !
	E3AS-HF6000DMN M1H		Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, NPN, M12 horizontal connector	No
	E3AS-HF6000SMT M1V	Spot Beam  2 mm	Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, PNP, IO-Link, M12 vertical connector	Yes !
	E3AS-HF6000SMN M1V		Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, NPN, M12 vertical connector	No
	E3AS-HF6000DMT M1V	Diffuse Beam  40 mm	Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, PNP, IO-Link, M12 vertical connector	Yes !
	E3AS-HF6000DMN M1V		Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, NPN, M12 vertical connector	No
	E3AS-HF6000SMT 2M	Spot Beam  2 mm	Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, PNP, IO-Link, 2 m cable	Yes !
	E3AS-HF6000SMN 2M		Photoelectric sensor, red laser class 1, spot beam type, 6000 mm, NPN, 2 m cable	No
	E3AS-HF6000SMT 2M	Diffuse Beam  40 mm	Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, PNP, IO-Link, 2 m cable	Yes !
	E3AS-HF6000DMN 2M		Photoelectric sensor, red laser class 1, diffuse beam type, 6000 mm, NPN, 2 m cable	No

* 5 m cable are also available.