

# Sensors Overview

## Omron Photoelectric Sensors. PNP for Factbird Duo, Factbird NXI

Model	Description	Range	IP rating	Link to manufacturer's site
E3AS-HL500LMT	General purpose Distance-settable sensor (without reflector). Also detects transparent objects. Uses a line as opposed to a spot to detect uneven surfaces. Spot version also available. Version with higher accuracy but with only 150mm range are available.	35-500mm	IP67, IP67G, IP69K	<a href="#">E3AS   OMRON, Europe</a>
E3ZM-R86	General purpose retro reflective sensor (with reflector E39-R1S). In many applications can be replaced by E3AS-HL500LMT	0-4m	IP67, IP69K	<a href="#">E3ZM   OMRON, Europe</a>
E3S-DBP22	Transparent Object Detection Sensor (with reflector E39-R21). Small spot version for detecting small objects or gaps. Versions with longer range available. In many applications can be replaced by E3AS-HL500LMT	0-500mm	IP67, IP69K	<a href="#">E3S-DB   OMRON, Europe</a>

## Omron Photoelectric Sensors. NPN for Factbird Digital

Model	Description	Range	IP rating	Link to manufacturer's site
E3AS-HL500LMN	General purpose Distance-settable sensor (without reflector). Also detects transparent objects. Uses a line as opposed to a spot to detect uneven surfaces. Spot version also available. Version with higher accuracy but with only 150mm range are available.	35-500mm	IP67, IP67G, IP69K	<a href="#">E3AS   OMRON, Europe</a>
E3ZM-R66	"General purpose retro reflective sensor (with reflector E39-R1S). Can in many applications be replaced by E3AS-HL500LMN"	0-4m	IP67, IP69K	<a href="#">E3ZM   OMRON, Europe</a>
E3S-DBN22	"Transparent Object Detection Sensor (with reflector E39-R21). Small spot version for detecting small objects or gaps. Versions with longer range available. Can in many applications be replaced by E3AS-HL500LMN"	0-500mm	IP67, IP69K	<a href="#">E3S-DB   OMRON, Europe</a>

## Omron Proximity Sensor. PNP for Factbird Duo, Factbird NXI

Model	Description	Range	IP rating	Link to manufacturer's site
E2E-XI6MBIT12-MI	Inductive Proximity Sensor. Ø12mm. IO-Link version	35-500mm	IP67, IP67G, IP69K	<a href="#">E3AS   OMRON, Europe</a>
E2E-X30MBITL18-MI	Inductive Proximity Sensor. Ø18mm. IO-Link version	0-4m	IP67, IP69K	<a href="#">E3ZM   OMRON, Europe</a>

## Omron Proximity Sensor. Legacy NPN for Factbird Digital

Model	Description	Range	IP rating	Link to manufacturer's site
E2A-M18KS08-M1-C1	Inductive Proximity Sensor.	0-8mm	IP67	<a href="#">E2A   OMRON, Europe</a>
E2Q5-N40ME3-M1	Inductive Proximity Sensor.	0-40mm	IP67	<a href="#">E2Q5   OMRON, Europe</a>

## Comet Temperature/Humidity Sensor

Model	Description	Range	IP rating	Link to manufacturer's site
T0110	Ambient temperature sensor. ATEX certified version available. 4-20mA analog output	-30 to +80 °C	IP65	<a href="#">Ambient temperature transmitter with 4-20mA output T0110   COMET SYSTEM, s.r.o.</a>
T3110	Ambient humidity sensor. ATEX certified version available. 4-20mA analog output	0 to 100 % RH	IP65 electronic, IP40 sensor	<a href="#">Temperature humidity transmitter, 4-20mA outputs. Weather sensor for environment monitoring.   COMET SYSTEM, s.r.o.</a>

## Ifm

Model	Description	Range	IP rating	Link to manufacturer's site
VNB001	Vibration Sensor. Measures RMS speed in accordance with ISO 10816. 4-20mA analog output, and PNP output	0-500mm/s	IP67	<a href="#">VNB001 - Vibration sensor - ifm electronic</a>
LDH292	air temperature/humidity sensor IO-Link			
DP2200	Evaluation system and display. 4-20mA to IO-Link			
TP3231	Evaluation unit for PT100/PT1000 temperature sensors. IO-Link			
TS2229	Temperature cable sensor with bolt-on sensor			

## Lem

Model	Description	Range	IP rating	Link to manufacturer's site
AT 20 B420L	Split core transducers for measuring AC currents. Other ranges available. 4-20mA analog output	0-20A	IP40	<a href="https://www.lem.com/en/20-b420l">https://www.lem.com/en/20-b420l</a>

## Other

Model	Description	Range	IP rating	Link to manufacturer's site
Omron position sensors	Photoelectric, Fiber optic, Proximity, Displacement...			<a href="#">Sensing   OMRON, Europe</a>
ifm position sensors	Photoelectric, Laser, Distance, Fibre optic, Inductive/Capacitive...			<a href="#">Position sensors - ifm electronic</a>
ifm process sensors	Pressure, Vacuum, Flow, Level, Temperature...			<a href="#">Process sensors - ifm electronic</a>
Sick position sensors	Photoelectric, Inclination, Inductive/Capacitive, Distance...			<a href="#">Product portfolio   SICK</a>
Sick process sensors	Pressure, Flow, Level, Temperature...			<a href="#">Product portfolio   SICK</a>