

Press Release

STEINEL Solutions recessed luminaire sensors as Application Controller (NET) or DALI-2 Input Device (IPD) - SENSOTEC now offers both!

Einsiedeln, November 23, 2022

STEINEL Solutions presents the latest generation of its built-in sensors: the SENSOTEC IPD sensors are a version of the SENSOTEC NET sensor product family that has been reduced to its sensor benefits. Unlike the NET sensors, which are used as single master application controllers and can be networked via Bluetooth mesh, the IPD sensors function as standardized DALI-2 input devices and do not have a wireless connection. What is the same with both is the sensor intelligence based on proven STEINEL high-frequency and passive infrared technology as well as the simple, flexible and fast installation thanks to a small and compact design.

The launch of the SENSOTEC IPD product family rounds off the SENSOTEC portfolio of STEINEL Solutions. Like all tried-and-tested SENSOTEC recessed luminaire sensors, the IPD sensors are also impressive thanks to STEINEL's proven passive infrared and high-frequency sensor technology.

"The market confirms to us that the sensor technology of our SENSOTEC sensors is great. Many customers want to use them in their products but use their own application controllers. That's why we decided to offer IPD sensors, a version that is reduced to the benefits in the field of sensor technology," explains Manuel Siegrist, SENSOTEC Product Manager. The IPD sensors are a DALI-2 certified input device and compatible with DALI-2 application controllers. So, the customer now has the choice: "If you already have a light management system, the use of the IPD sensors is recommended. If, on the other hand, you need a complete solution for your lighting management, the proven NET sensors as application controllers are the products of your choice," says Siegrist.

The SENSOTEC IPD sensors have the same housing and thus the same mechanical dimensions as the sensors of the SENSOTEC NET generation. Thanks to their small and compact design, the various IPD sensors are suitable for optimal integration in narrow luminaires. They supply the sensor data to the controller via the wired classic DALI network, while the power supply via the two DALI bus lines saves further control gear in the luminaires. The sensors feature integrated motion sensor (DALI instance type 3) and light sensor (DALI instance type 4), with adjustable detection range and sensitivity via Memory Bank 2.

The HF2 IPD and PIR IPD are available for recessed luminaire applications, namely with the HF2 IPD as a high-frequency sensor module capable of detecting motion through glass and non-metallic materials, and with the PIR IPD as a presence detector with a patented Fresnel lens covering a presence detection area of 4x4 m (presence and radial motion detection) or 6x6 m (tangential motion detection).

The proven highbay variants are also available as IPD sensors for luminaire installation or for mounting on the luminaire. They are designed as applications for high ceilings in office and commercial buildings, public buildings, industrial halls with room heights up to 14 m. Depending on the application, the Highbay sensors are offered with two different detection ranges that vary depending on the mounting height. Both are available as luminaire recessed versions as well as luminaire surface mounted with Zhaga base or stranded wires already brought out:

- HB PIR 345 IPD: An indoor passive infrared motion detector whose 30x4 m (radial motion) detection area is ideal for rectangular detection in, for example, warehouses, high-bay warehouses, machine shops and check-in areas.
- HB PIR 3360 IPD: A high-precision 360° passive infrared sensor with a maximum detection area diameter of 36 m, enabling surveillance of up to 1000 m².

Stefan Walker, Head of OEM Engineering at STEINEL Solutions AG, sums up: "The IPD sensors offer the usual sensor benefits, and this product family enables us to address a major customer need in the market as well as other applications. As an OEM specialist with proven expertise in product development, sensor technology and communication, we also offer to adapt the specifications of our sensors to individual customer needs in a development project, should a use case not be covered."

The SENSOTEC IPD sensors are available immediately and exclusively from STEINEL Solutions via direct sales.

Technical data

	HF2 IPD	PIR IPD
GTIN	4007841085476	4007841085483
Type	9025	9026
Dimensions	52 × 40.5 × 29.2 mm Hole spacing 61 mm 3-D data available online	66.4 × 20.4 × 18.5 mm Fixing spacing 35 mm 3-D data available online
DALI instances	Occupancy sensor (type 3) Light sensor (type 4)	Occupancy sensor (type 3) Light sensor (type 4)
Sensor technology	High-frequency technology	Passive infrared technology
Transmitter power	1 - 2 mW	-
Transmission frequency	5.8 GHz	-
Light measurement range	4 - 1000 lx	4 - 1000 lx
Angle of coverage	360° with 160° aperture angle	-
Mounting height	2.5 - 3.5 m	2.0 - 5.0 m
Optimum mounting height	2.8 m	2.8 m
Reach, radial	Ø 8 m (50 m ²)	4 x 4 m (16 m ²)
Reach, tangential	Ø 8 m (50 m ²)	6 x 6 m (36 m ²)
Connection	0.34 - 0.75 mm ²	0.34 - 0.75 mm ²
Supply voltage / current consumption	12 - 22.5 VDC / max. 36 mA	12 - 22.5 VDC / max. 16 mA
IP rating:	IP20	IP20
Temperature range	-20°C to +60°C	-25°C to +55°C
tc	60°C	55°C
Interfaces	DALI	DALI
Approval marks / Conformity	CE, DALI2	CE, DALI2
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304

Highbay Sensors

	HB PIR 345 IPD Intra	HB PIR 345 IPD Wire	HB PIR 345 IPD Zhaga
GTIN	4007841085445	4007841085452	4007841085469
Type	9015	9024	9023
Dimensions	91.5 × 63.3 × 49 mm 3-D data available online	91.5 × 63.3 × 49 mm 3-D data available online	91.5 × 63.3 × 57 mm 3-D data available online
DALI instances	Occupancy sensor (type 3) Light sensor (type 4)	Occupancy sensor (type 3) Light sensor (type 4)	Occupancy sensor (type 3) Light sensor (type 4)
Sensor technology	Passive infrared technology	Passive infrared technology	Passive infrared technology
Light measurement range	4 - 1000 lx	4 - 1000 lx	4 - 1000 lx
Mounting height	4.0 - 14.0 m	4.0 - 14.0 m	4.0 - 14.0 m
Reach, radial	30 x 4 m (120 m ²)	30 x 4 m (120 m ²)	30 x 4 m (120 m ²)
Reach, tangential	30 x 4 m (120 m ²)	30 x 4 m (120 m ²)	30 x 4 m (120 m ²)
Connection	0.34 - 0.75 mm ²	Connection strands (0.5 mm ² , L=250 mm, white)	Zhaga Book 18
Supply voltage / current consumption	12 - 22.5 VDC / max. 16 mA	12 - 22.5 VDC / max. 16 mA	12 - 22.5 VDC / max. 16 mA
IP rating:	IP20 / IP65* * with sealed lens	IP65	IP65
Temperature range	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
tc	50°C	50°C	50°C
Interfaces	DALI	DALI	DALI
Approval marks / Conformity	CE, DALI2	CE, DALI2	CE, DALI2
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304
	HB PIR 3360 IPD Intra	HB PIR 3360 IPD Wire	HB PIR 3360 IPD Zhaga
GTIN	4007841085414	4007841085421	4007841085438
Type	9016	9022	9021
Dimensions	91.5 × 63.3 × 49 mm 3-D data available online	91.5 × 63.3 × 49 mm 3-D data available online	91.5 × 63.3 × 57 mm 3-D data available online
DALI instances	Occupancy sensor (type 3) Light sensor (type 4)	Occupancy sensor (type 3) Light sensor (type 4)	Occupancy sensor (type 3) Light sensor (type 4)
Sensor technology	Passive infrared technology	Passive infrared technology	Passive infrared technology
Light measurement range	4 - 1000 lx	4 - 1000 lx	4 - 1000 lx
Mounting height	2.8 - 14.0 m	2.8 - 14.0 m	2.8 - 14.0 m
Reach, radial	Ø 14 m (154 m ²)	Ø 14 m (154 m ²)	Ø 14 m (154 m ²)
Reach, tangential	Ø 36 m (1018 m ²)	Ø 36 m (1018 m ²)	Ø 36 m (1018 m ²)
Connection	0.34 - 0.75 mm ²	Connection strands (0.5 mm ² , L=250 mm, white)	Zhaga Book 18
Supply voltage / current consumption	12 - 22.5 VDC / max. 16 mA	12 - 22.5 VDC / max. 16 mA	12 - 22.5 VDC / max. 16 mA
IP rating:	IP20 / IP65* * with sealed lens	IP65	IP65
Temperature range	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
tc	50°C	50°C	50°C
Interfaces	DALI	DALI	DALI
Approval marks / Conformity	CE, DALI2	CE, DALI2	CE, DALI2
Standards	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304	EN 61347-1 EN 61347-2-11 EN 55015 EN 61547 EN 62386-101 EN 62386-103 EN 62386-303 EN 62386-304

About SENSOTEC

With the SENSOTEC portfolio from STEINEL Solutions, OEM product manufacturers have a flexible and easy-to-install solution for equipping lights with precise sensor intelligence - without having to compromise on design. The sensors are basically designed for the lighting industry, so the sensor technology is used, for example, in pendant lights, linear lights, damp-proof lights or LED surface-mounted lights. With a slight modification effort, the sensors can also be used in other industries, ranging from the sanitary industry to HVAC to household appliances and more - there are almost no limits to the application. The recessed light sensors from STEINEL Solutions AG are available with different connections and are compatible with several protocols.

About STEINEL Solutions AG

As an OEM partner with 120 employees in Switzerland, STEINEL Solutions AG serves its customers from the idea to the finished product with a service package consisting of consulting, product development, industrialization, manufacturing, and services – a real one-stop shop. With sensor technology, communication, low power management and compliance management as its development expertise, the company creates customer-specific product applications and tailor-made solutions. Well-known market leaders and numerous hidden champions are among its customers. Thanks to its membership to the international STEINEL Group, STEINEL Solutions has access to a European network. Depending on the product life cycle and market success, it is therefore possible to scale quickly and adequately and to extend the series assembly of large-volume products to other sites. For more information, please visit www.steinell.ch.

Do you have questions about our SENSOTEC portfolio?

Please contact our Product Management!

Manuel Siegrist & Andrea Lachner

sensotec@steinell.ch

www.steinell.ch/sensotec