PHILIPS

Sensors

EasyAir

SNS300

Datasheet

EasyAir SNS300

EasyAir SNS300 for networks is based on Zigbee technology for use in wireless systems for indoor connected lighting. It provides a simple solution to actively manage and control energy usage, while remotely adjusting light settings and determining service needs. With the added Zigbee functionality, EasyAir SNS300 can now be an integral part of networks also based on the Zigbee standard. A program is under development by Philips to qualify third-party network systems for use with EasyAir SNS300. EasyAir SNS300 is renowned for its compact size and ability to easily integrate into luminaires. In addition, the sensors are compatible with Philips Xitanium SR LED drivers, eliminating the need for auxiliary devices and alleviating time-consuming configuration issues. The simple two-wire connection from driver to sensor reduces design-in complexity and eliminates additional components that add to overall costs. Now SNS300 can provide luminaire-specific information into networks for centralized control and enable functionality such as energy monitoring, scheduling and load shedding.

Features

- Compatible with qualified gateway and network partners
- Occupancy and daylight sensing in one device
- Compact size, 2-wire connection
- Operates with Philips Advance Xitanium SR LED drivers to control light levels and report energy data

Benefits

- Choice of network systems to suit the application
- Combines functionality to reduce need for multiple components
- Cost-effective solution for energy-savings and code-compliancy strategies
- 5-year limited system warranty with Philips Xitanium LED drivers

Applications

- Conference rooms
- Individual offices
- Open offices
- Classrooms
- Storage and break areas
- Restrooms
- Lobbies
- Stairways

April 2019

Ordering Information

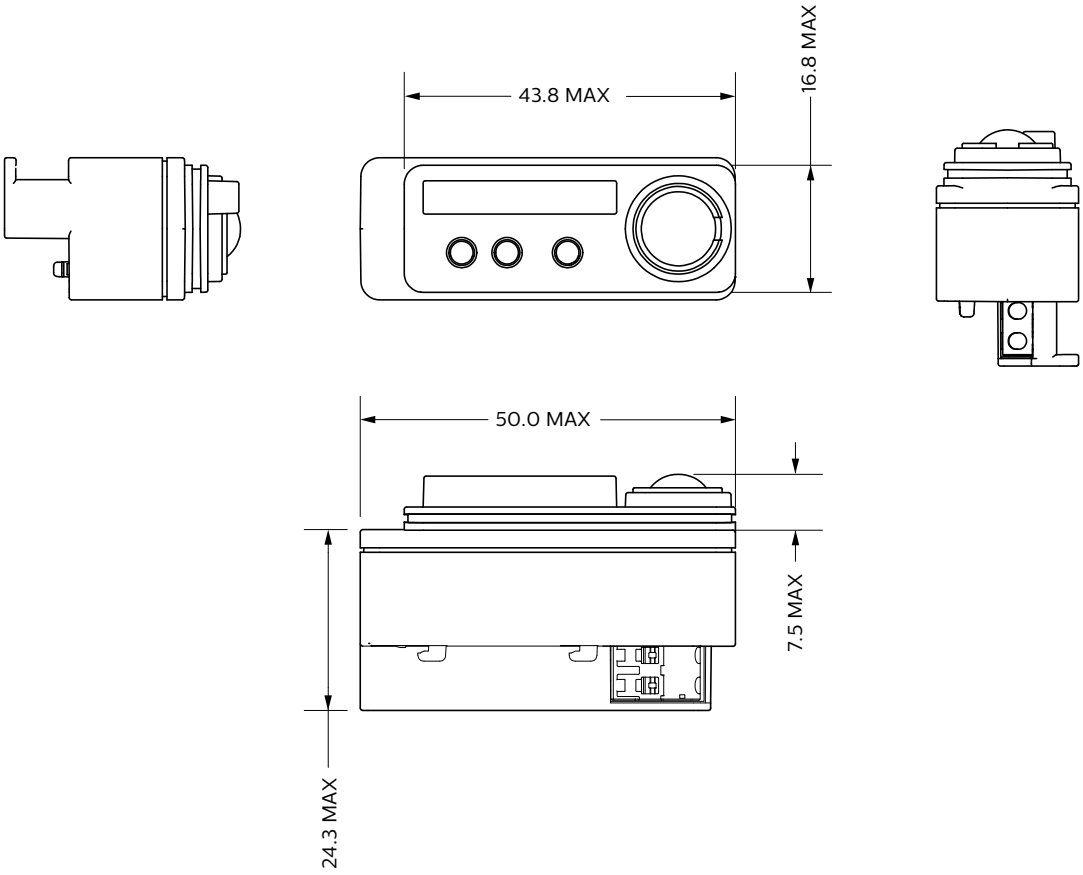
Commercial product name	12NC	Carton Quantity
EasyAir SNS300/w	9290 007 95606	50 pcs
EasyAir SNS300CMP/w	9290 017 02606	50 pcs

Product Data

All specifications are typical and at 25 °C Tcase unless otherwise specified.

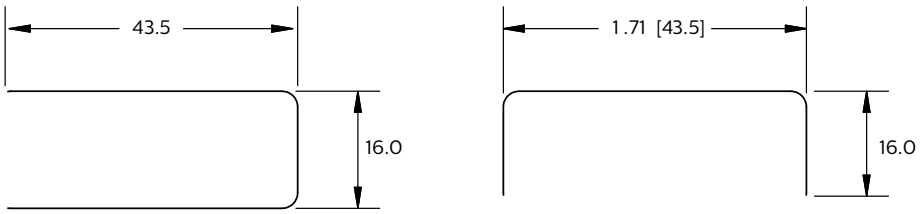
Electrical Information	
Input Voltage	Powered by SR driver low-voltage interface
Current Consumption	13 mA
Nominal Power Consumption	200 mW
Standby Power	< 1 W on luminaire level, including driver standby power
Occupancy Sensing	
Type	Passive infrared (PIR)
Behavior	Determined by network settings, no stand-alone operation
Daylight Sensing	
Behavior	Determined by network settings, no stand-alone operation
Viewing Angle	40° (half value sensitivity); 2% cut-off point at 75°
Environment & Approbation	
Operating Ambient Temperature Range	0 °C to 55 °C
Operating Humidity	0 – 95% non condensing
Storage Temperature	-25 °C to 85 °C
Storage Humidity	0-95% non condensing
Max Case Temperature (Tcase)	55 °C
Certification	CE, ENEC, RED, EMC
Warranty	5 years
Digital Interface	Xitanium SR
Other	
Status Indicators	Red, Yellow. Yellow LED on: Vacancy & Sensor is functional; Red LED on: Motion is detected
Energy reporting	Calculated from last power on: % On, Energy Consumed (Whr), System on time (hrs), Avg power consumed (w-hr), Lamp on time (hrs)
No. Drivers per Sensor	4 max
Max Distance Switch-to-First-Luminaire	10 m line-of-sight
Max Distance Luminaire-to-Luminaire	12 m line-of-sight
No. Switches per Group	10 max
Field Configuration	via NFC or IR, parameters set via Philips field apps

Sensor Dimensions (mm)

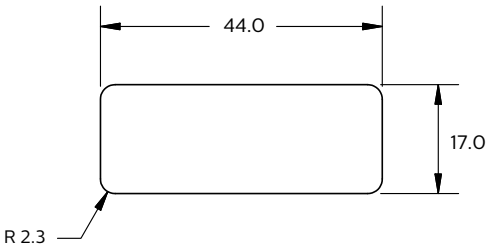


Mounting Dimensions (mm)

Mounting in U-shaped slot in sheet metal (max thickness 1 mm), tolerance +0.2 mm/-0.0 mm



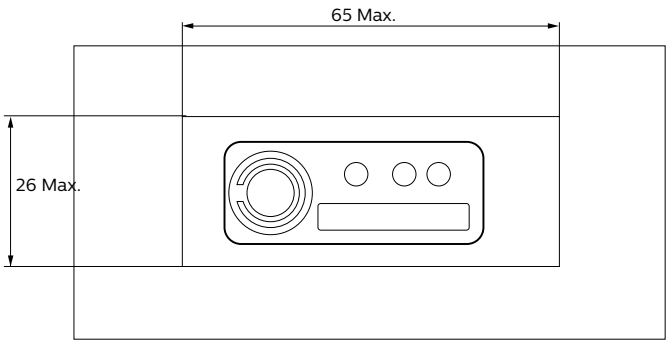
Mounting in cut-out in sheet matal (thickness 0.7 mm to 1.2 mm), tolerance +/-0.2 mm

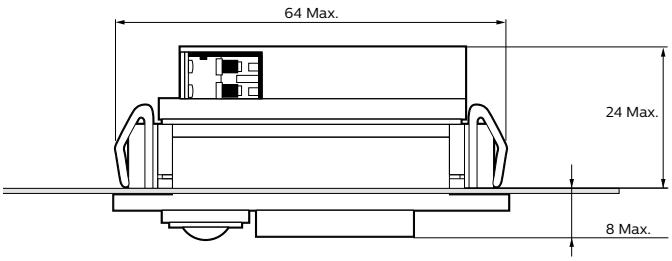


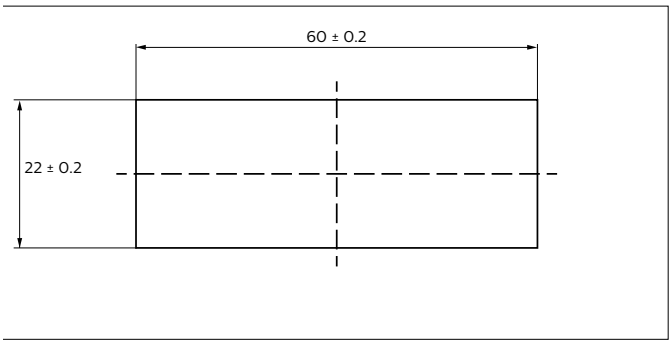
Mounting in a bracket (SMB-50)

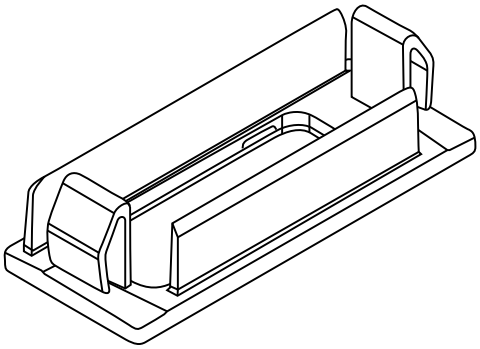
Accessories	12NC
EasyAir SMB-50/w	929001540206

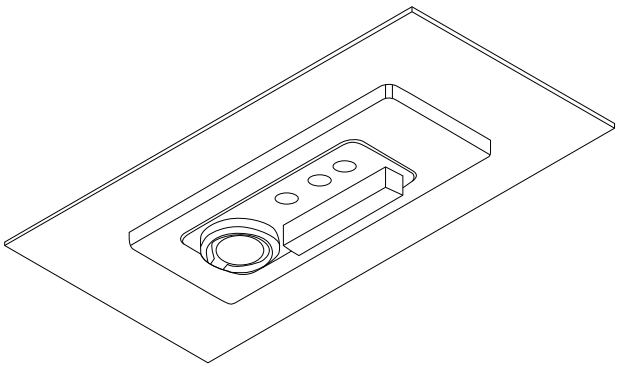
The EasyAir SNS300/w can be mounted in a bracket (SMB 50/w). Refer the figures for details on mounting and design-in into luminaire. All dimensions are in mm.

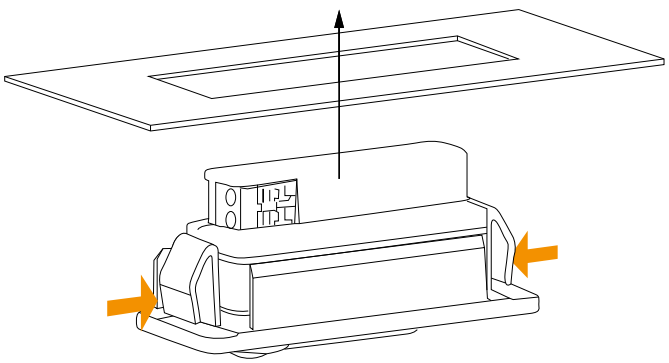










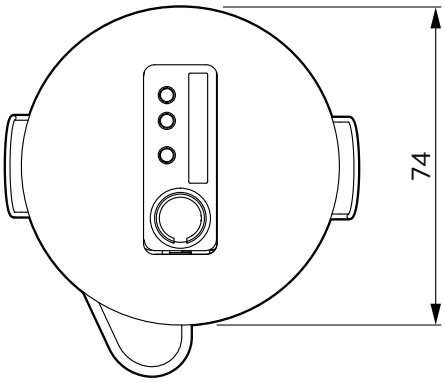


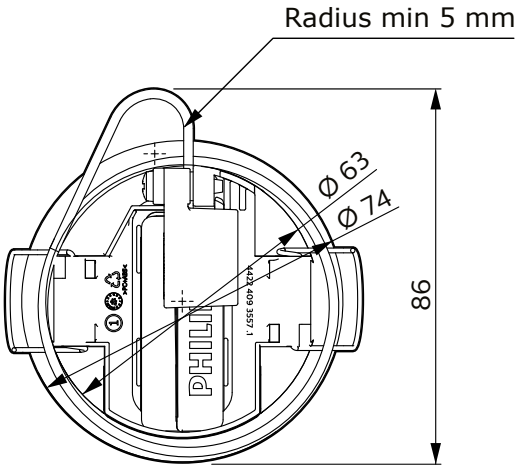
Press springs inwards on both sides before the bracket can slide-in the luminaire hole.

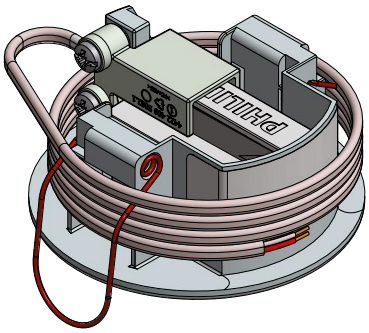
Installing EasyAir SNS300 with ceiling mount bracket (SNS300CMP)

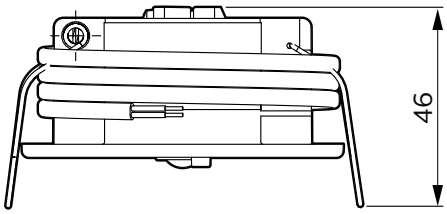
The ceiling mount EasyAir SNS300CMP bracket is premounted with an EasyAir SNS300 along with the cable. For cut-out in the ceiling and mounting, refer the figures below. All dimensions are in mm.

Product	12NC
EasyAir SNS300CMP/w	9290 017 02606



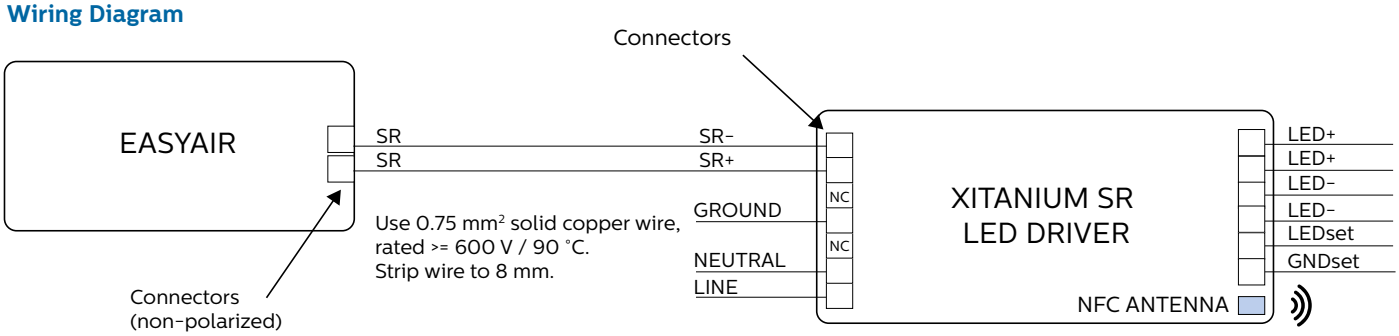


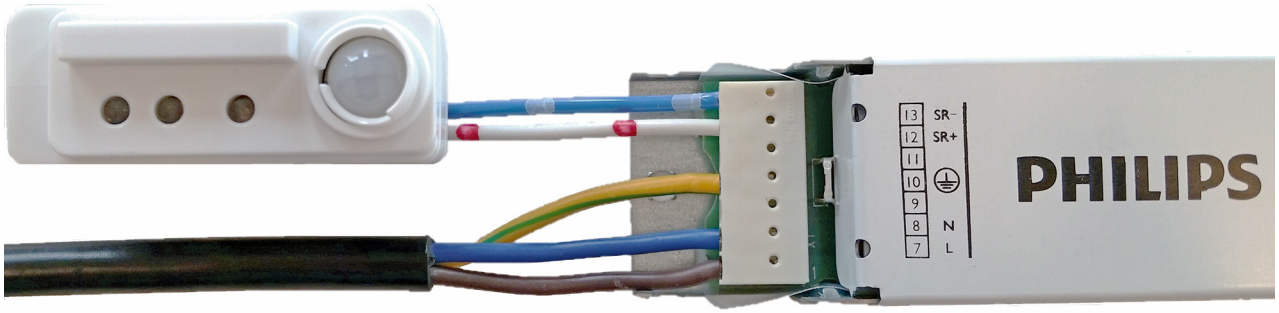




EasyAir SNS300

Wiring Diagram



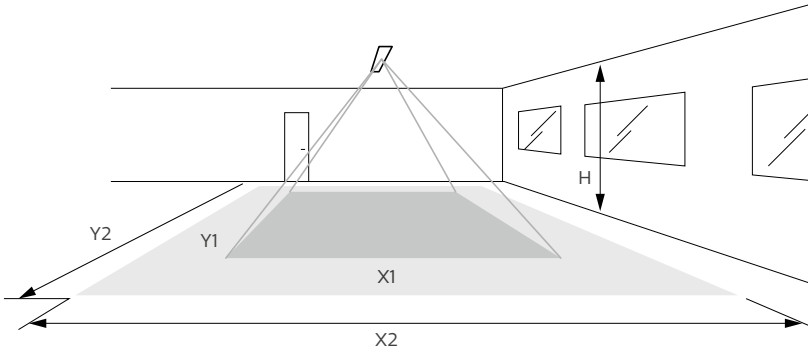


EasyAir SNS300

Occupancy Sensing

The detection area for the movement sensor can be roughly divided into two parts:

- Minor movement (person moving ≤ 0.9 m/s).
- Major movement (person moving ≥ 0.9 m/s)..



Height	Minor Movement		Major Movement	
h	Y1	X1	Y2	X2
2.4 m	2.9 m	2.7 m	4.5 m	2.9 m
3 m	3.6 m	3.4 m	5.4 m	3.6 m

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of EasyAir SNS300.

Daylight Sensor

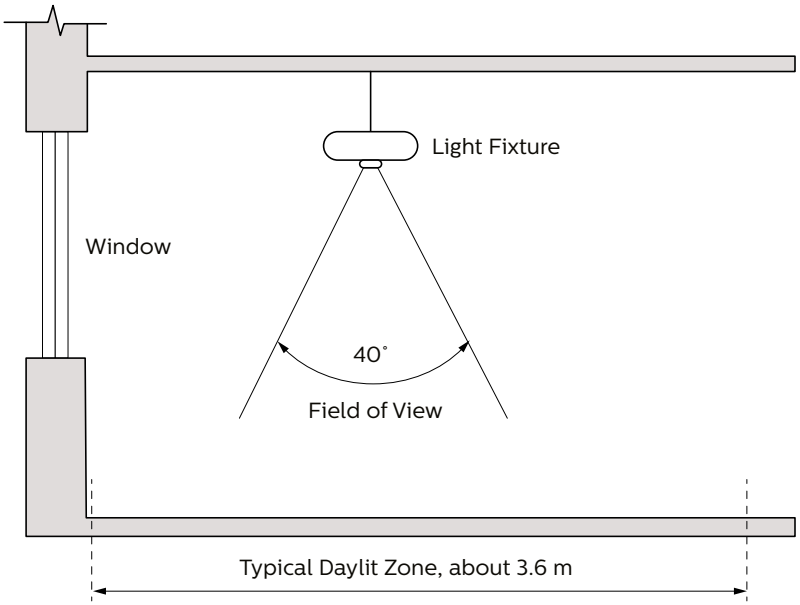
Note: EasyAir SNS300 does not provide stand-alone operation based on daylight. Status is provided to the network system for centralized control and command.

The light sensor measures the total amount of light in a circular field of ≈ 80% of the PIR detection area. The following aspects should be observed during installation:

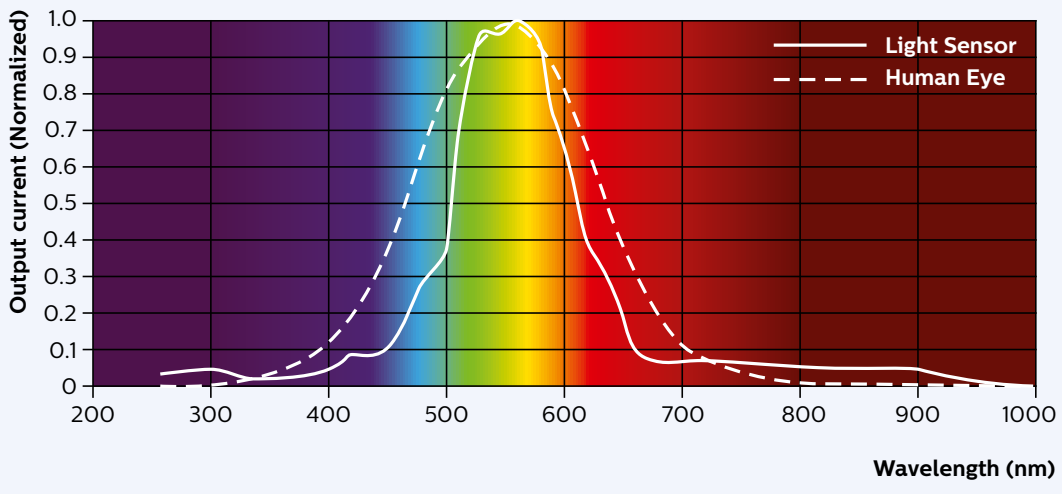
- Minimum distance from the window ≥ 0.6 m.
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car bonnet) as this will lead to incorrect light regulation.

As a guideline the formula 0.72 x H can be used to calculate the minimum distance between the window and sensor whereby H is the height from the bottom of the window to the ceiling.

Photosensor Spatial Response



Photosensor Spectral Response



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Data subject to change

www.lighting.philips.co.uk/oem-emea/products/connected-lighting