PHILIPS

Sensors

Specification Sheet

SNS210 IA

The Philips SNS210 IA is the ideal solution for per-luminaire control of luminaires. It combines occupancy sensing, daylight harvesting and task tuning in a single, compact package for easy luminaire assembly. The SNS210 IA operates with the established Xitanium SR driver standard to make a simple two wire connection between sensor and driver, thus eliminating the need for multiple components and auxiliary devices.
A luminaire with an integrated SNS210 IA works with Interact Pro systems. For detailed information, see the system guide.

SNS210 IA

Features

- Occupancy sensing, daylight harvesting and task tuning in one device
- Compact size, 2-wire connection
- Operates with Philips Xitanium SR drivers and qualified wireless switches
- Configuration of the sensor parameters by the Interact Office or Interact Pro applications
- Supports Tunable White
- Supports testing the emergency functionality of the luminaire remotely

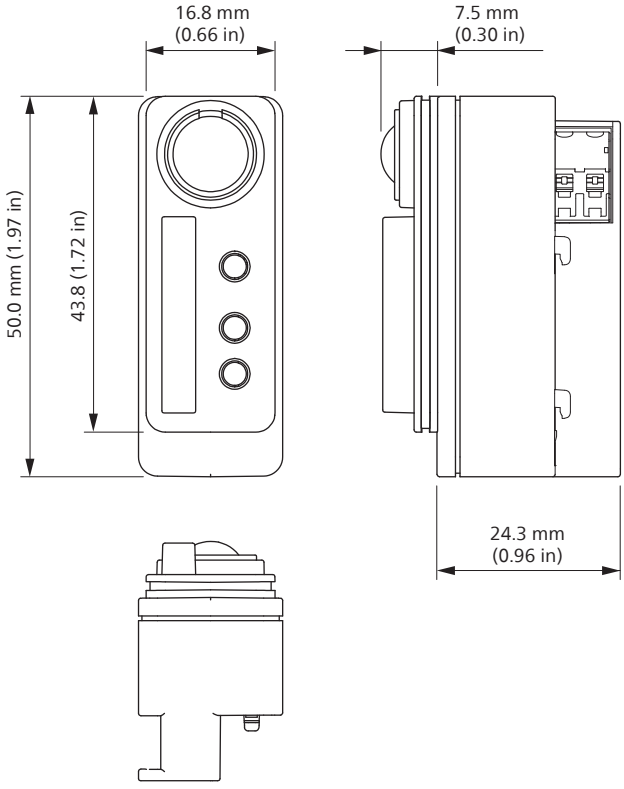
Benefits

- Combines functionality to reduce need for multiple components
- Fits into existing and new-design luminaires
- Cost-effective solution for energy-savings
- Five year limited system warranty with Philips Xitanium LED drivers

Applications

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

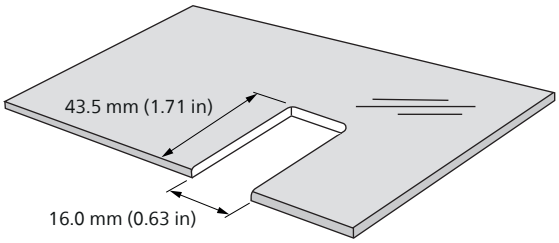
Sensor dimensions

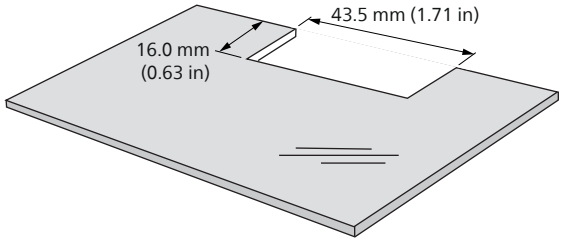


Mounting dimensions

Mounting in U-shaped slot

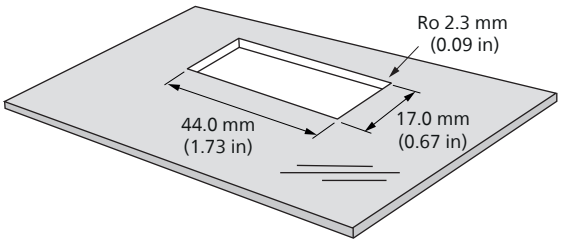
In sheet metal (max thickness 1 mm), tolerance +0.2 mm/-0.0 mm.





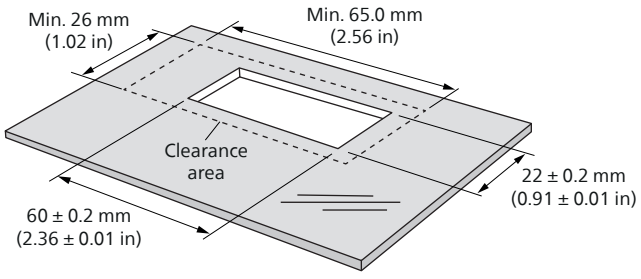
Mounting in cut-out

In metal sheet (thickness 0.7 mm to 1.2 mm), tolerance +/-0.2 mm

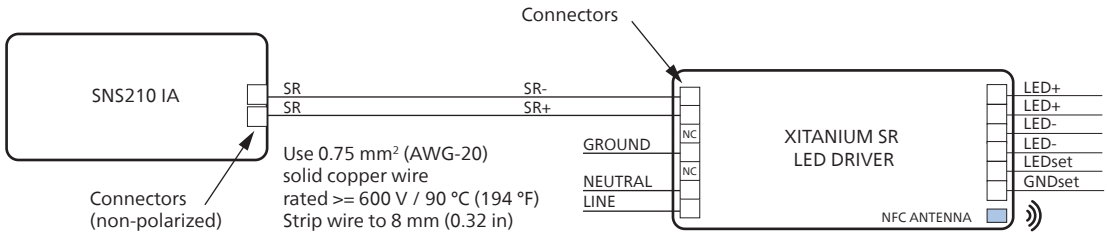


Mounting with a clip for upgradable sensor slot

The SNS210 IA can be mounted in a surface mounted bracket or in an SA0210/05 mounting clip for the upgradable sensor slot. See Accessories for details.



Wiring diagram



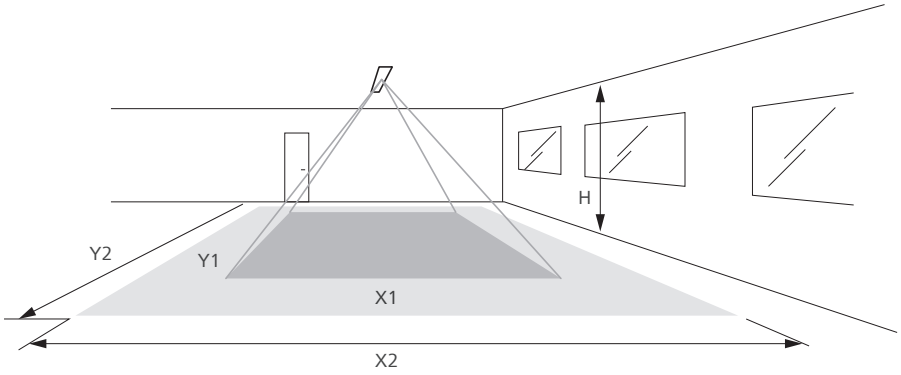
Occupancy sensing

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

- Minor movement, person moving ≤ 0.9 m/s (2.95 ft/s)
- Major movement, person moving ≥ 0.9 m/s (2.95 ft/s).

Height	Minor movement		Major movement	
h	**X1**	**Y1**	**X2**	**Y2**
2.4 m (7.9 ft)	1.9 m (6.2 ft)	2.9 m (9.5 ft)	2.9 m (9.5 ft)	4.3 m (14.1 ft)
3 m (9.8 ft)	2.4 m (7.9 ft)	3.6 m (11.8 ft)	3.6 m (11.8 ft)	5.4 m (17.7 ft)

Note
Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of SNS210 IA.



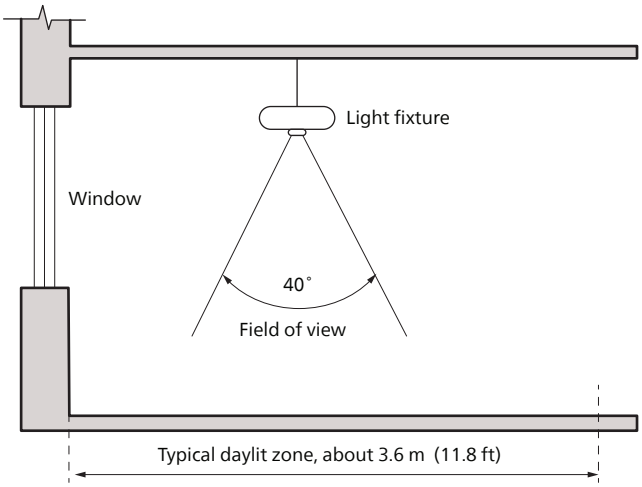
Daylight sensor

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

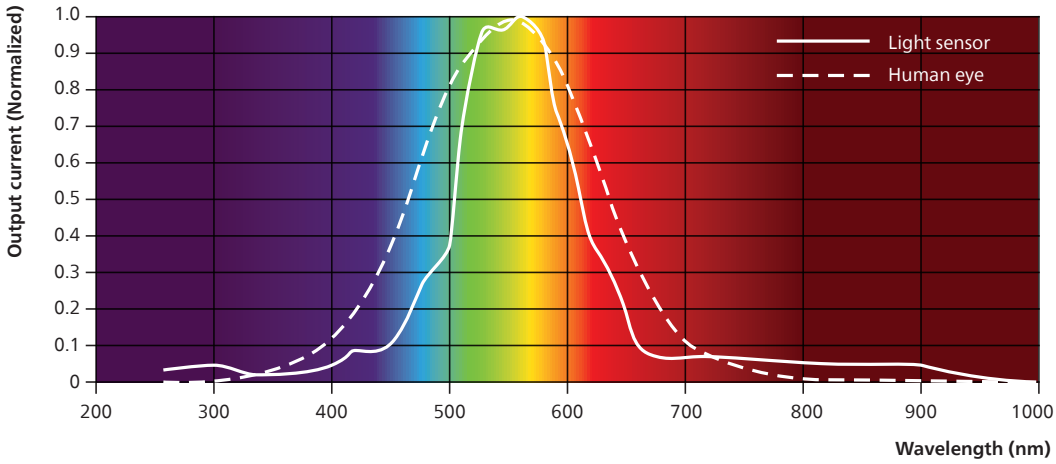
- Minimum distance from the window ≥ 0.6 m (2 ft).
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car bonnet) as this will lead to incorrect light regulation.

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



Specifications

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

Physical information

Overall dimensions	50 x 19.0 x 31.5 mm (1.97 x 0.75 x 1.24 in)
Housing (luminaire hole) (l x w)	44 x 17 mm (1.73 x 0.67 in)
Net weight per piece	17 g
Volume required inside luminaire (l x w x h)	(50 x 19 x 24 mm) (1.97 x 0.75 x 0.94 in)
Color	White and black
Connectors	WAGO 2060
Input wire cross-section (solid conductor wire)	0.25 to 0.75 mm^2 24 to 18 AWG
Input wire cross-section (stranded wire)	0.3 to 0.5 mm^2 22 to 20 AWG

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
Frequency	2.4 GHz

Occupancy sensing

Type	Passive infrared (PIR)
Viewing angle	X = 62°, Y = 84° (See detection pattern)

Daylight sensing

Daylight based control	Default enabled
Viewing angle	40° (half value sensitivity); 2% cut-off point at 75°

Environment and approbation

Operating ambient Temperature Range	0 to 55 °C
Operating humidity	20 to 85% non condensing
Storage temperature	-25 to 85 °C
Storage humidity	0 to 95% non condensing
Ingress protection	IP20
Max case temperature (Tc)	55 °C
Approbations	CE, UKCA, ENEC, RTTE, EMC
Warranty	5 year warranty for released Philips system combination (sensor and compatible driver). 3 year warranty for sensor only.
Digital interface	Xitanium SR

Other

Status indicators	Red, yellow. yellow LED ON: vacancy and sensor is functional; red LED ON: motion is detected
Number of drivers per sensor	4 max.
Maximum distance switch-to-first-luminaire	10 m line of sight
Maximum distance luminaire to luminiare	12 m line of sight

Accessories

Mounting clip for upgradable sensor slot

Order name	Color	Order number
SA0210/05 F Mnt Clip SNS 60x22	White	9137 136 20303
SA0210/15 F Mnt Clip SNS 60x22	Black	9137 010 47803

Recommended for easy field upgrades.

Recessed mounting plate

Order name	Color	Order number
LCA8008/05 ActiLume Round Mntg Clip W	White	9137 003 59003

Surface mount box

Order name	Color	Region	Order number
SA0600/05 Ind. Surf Mnt SCxxxx/SNSxxx	White	Europe	9137 136 20803
SA0600/05 Ind. Surf Mnt SCxxxx/SNSxxx	White	US	9137 136 20813

Ordering Information

Commercial product name	Color	Region	MOQ	Order number
SNS210/w IA	White	Europe	50	9290 034 10406
SNS210/w IA	White	US	50	9290 034 11013
SNS210/b IA	Black	Europe	50	9290 028 52006
SNS210/b IA	Black	US	50	9290 027 24413