PHILIPS

Indoor Controls

SNS210 IA (SWZCS)

Sensor compatible with Interact Pro scalable system

Project:

Location:

Cat. No:

Type:

Lamps: Qty:

Notes:

The Philips SNS210 IA is the ideal solution for for luminaire level lighting control. 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 will work with the Interact Pro scalable system.

Note: Sensor not sold separately, must always be ordered as a factory installed option with luminaires and retrofit kits

Compatible products	Order number
IRT9015 Interact Commissioning Remote	913700396703
SWS200 ZGP Switch Dim 4B	913701046713
UID8451/10 ZGP Switch Dim 2B	913700364403

CERTIFIED LISTED interact ready.

SNS210 IA (SWZCS) Sensor

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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 Interact Pro applications

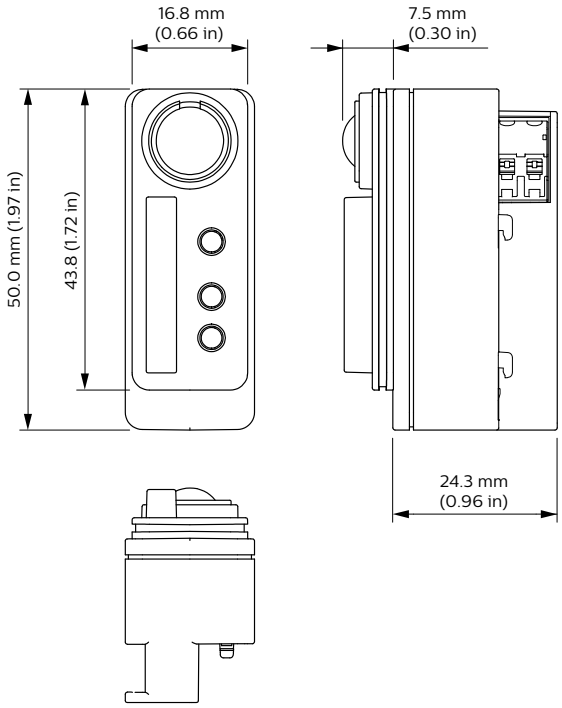
Benefits

- 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 and libraries
- Storage and break areas
- Restrooms
- Lobbies
- Stairways

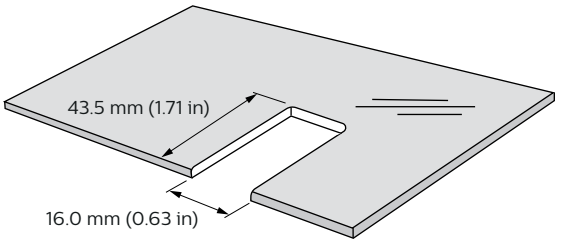
Sensor dimensions

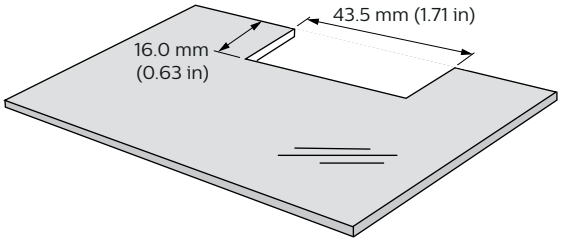


Mounting dimensions

Mounting in U-shaped slot

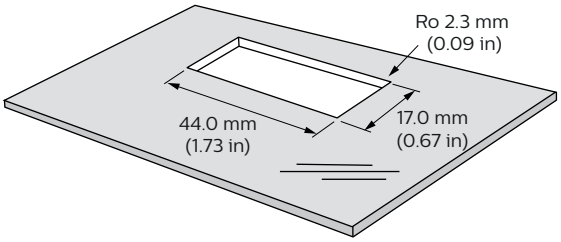
In sheet metal (max thickness 1 mm), tolerance +0.2 mm/-0.0 mm.





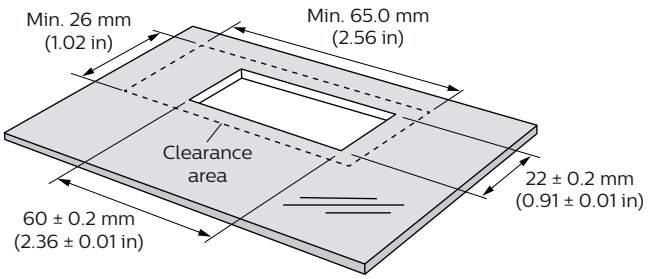
Mounting in cut-out

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.



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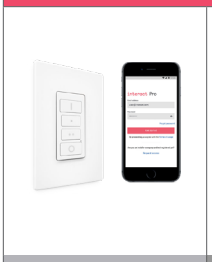
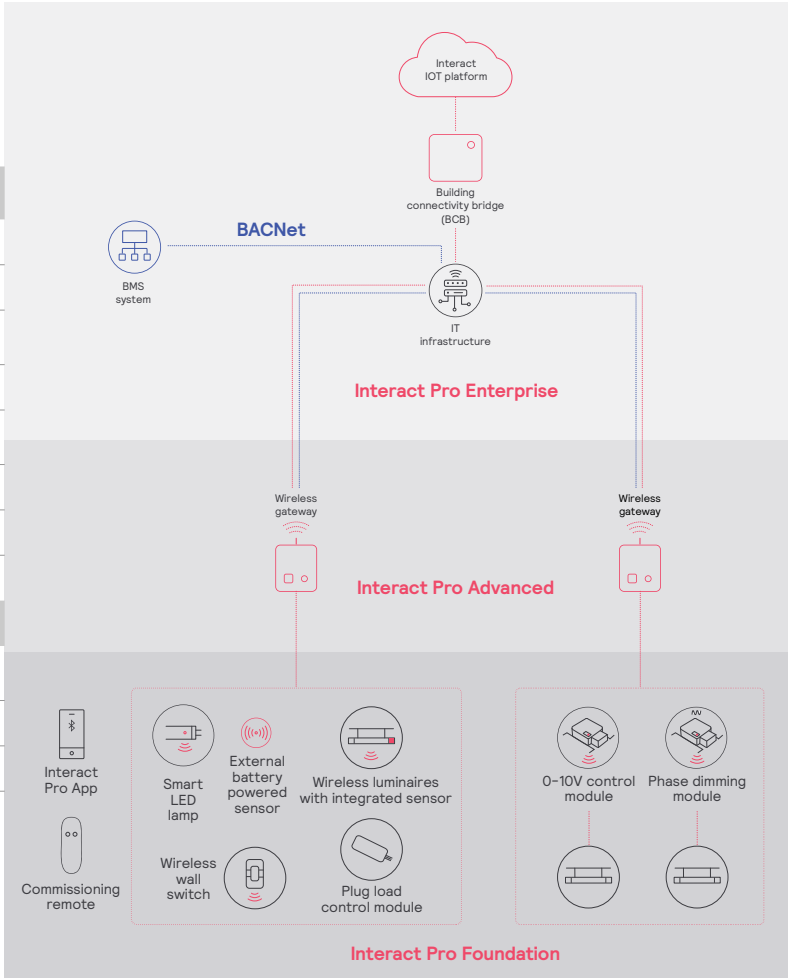
	Interact Pro scalable system		
			
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDS	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



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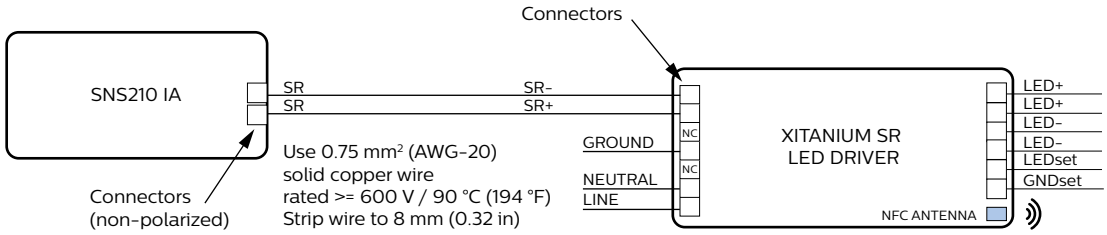
Wiring diagram



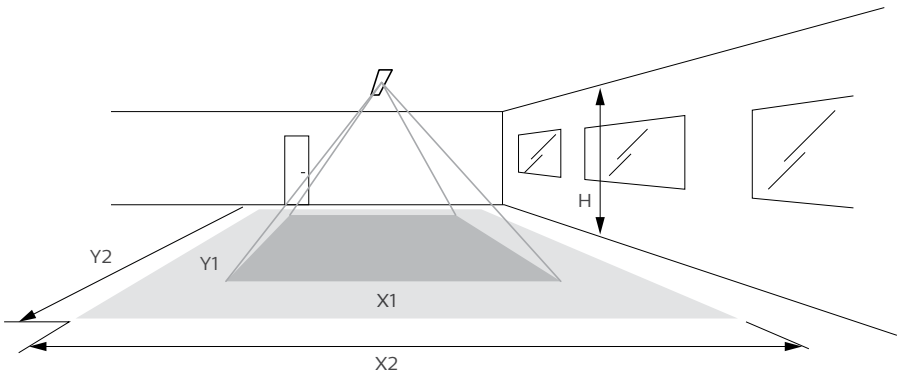
Occupancy sensing

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.



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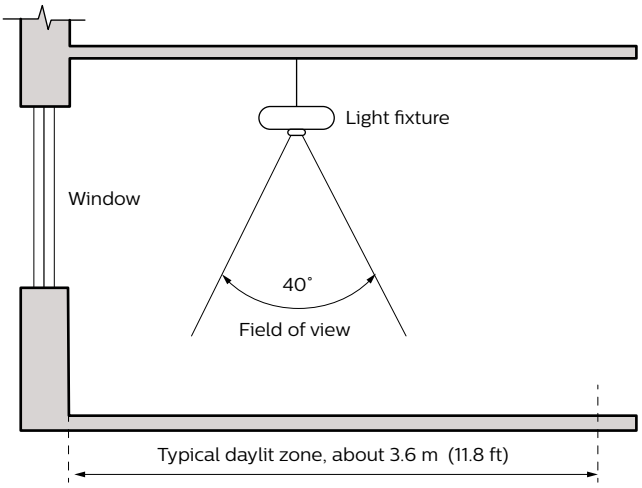
Daylight sensor

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:

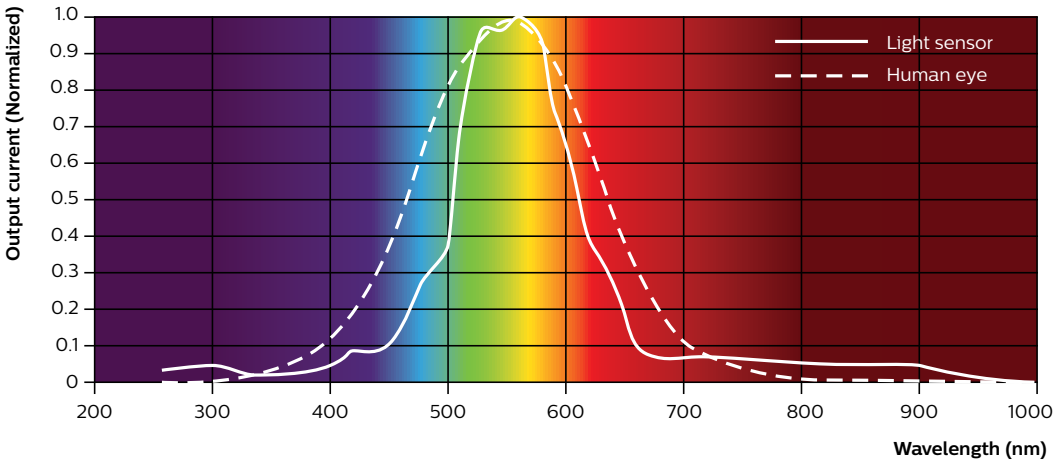
- Minimum distance from the window ≥ 0.6 m (2 ft).
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car bonnet) as this will lead to incorrect light regulation.

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



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Specifications

All specifications are typical and at 25 °C Tc 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	0-95% non condensing
Ingress protection	IP20
Max case temperature (Tc)	55 °C
Approbations	CE, ENEC, RTTE, UL
Warranty	5 years warranty for released Philips system combination (sensor and compatible driver). 3 years 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

Signify North America Corporation
200 Franklin Square Drive,
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone 800-668-9008