

PHILIPS

SpaceWise

### **Flexible, energy-efficient** LED lighting for workspaces

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How wireless lighting controls can help to transform your workspace

## Enjoy the flexibility, love the workspace

An amazing thing happens when you install controllable wireless lighting. Uninspiring municipal and private offices are transformed into vibrant spaces where people immediately feel more comfortable. And when they feel comfortable, that's when productivity flows.

An open-plan space, room-by-room, divided into multi-purpose zones – wireless lighting controls give you the flexibility to set the right mood for the task at hand.

An inspiring meeting room to spur creativity and spark ideas. Or a space where you feel safe working alone after dark. Any lighting mood is possible in an instant - and all from a simple commissioning app.

Like changing your office layout and keeping things fresh? Not a problem. SpaceWise is as flexible as you need it to be. Installation is easy - with no need for expensive and complicated rewiring. Quickly adjust the settings and you're all set.

#### Save energy, protect your investment

Why pay for lighting you're not using? With controllable wireless lighting you don't have to. Embedded sensors 'talk' to each other and detect when someone is in the space. Plus daylight-dependant dimming automatically adjusts the lighting according to the daylight available - saving you money while providing a constant light level.

The days of wasting energy after-hours are over too. Background lighting gives people working late that feeling of security – despite luminaires operating at a fraction of their full output.

And don't worry about wasting your money if you move office. Wireless lighting is portable. Where you go, it goes.

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## Flexible office lighting for municipal and private buildings

Installing a new lighting system used to be a major expense and a lot of hassle. The complicated designs, the expensive commissioning, all the material costs. It could feel like you were running a mini building project.



But things have changed. Technology has evolved. Today's wireless lighting control systems are affordable to small and large businesses alike. And the great news is, they couldn't be easier to install – no matter what lighting system you're using right now.

#### Quick and easy set-up

SpaceWise is all about embedded sensors and wireless controls. No need for additional control, extra wiring between luminaires or to the wireless switches.

And forget about expensive commissioning. Contol your ofice lighting via an app which offers simplified commissioning and greater flexibility, making saving energy easy.



#### SpaceWise benefits

#### at a glance

#### Save on energy

LED luminaires and embedded sensors reduce energy usage by up to 70%.

#### Cut costs

Automatic dimming ensures you only pay for lighting when and where it is needed

#### Provide visual comfort

Set lighting levels to keep employees happy, productive and feeling safe

#### Easy to install and flexible

Installation is easy and wireless controls ensure the system can be easily reconfigured to support any office layout changes

#### Protect the planet

Sustainable LED technology doesn't just help the environment – it helps keep you compliant and you may qualify for Green Building Certification credits



## Simple to install, easy to use

With SpaceWise, all the hard work is done for you. No re-circuiting or new control wiring is needed. The plug-and-play system has you up and running in no time – the intuitive interface via a commissioning app makes your job easier without having to be a controls expert.





Once the system is connected, all it takes is some quick fine-tuning. Just choose the most appropriate room mode for the space, and the dimming settings and wireless, battery-free, kinetic switches kick in automatically.

Occupants won't need any training because SpaceWise is so easy to use – everything is controlled from a simple commissioning app.

As for the energy savings, they start as soon as you activate the system. The dimming technology responds to the occupancy sensors and daylight available. It's all done automatically.

#### Installation

#### at glance

- Plug-and-play set-up
- Stand-alone system no network, computer or light-meter needed
- Facility managers can change luminaire grouping to better align with occupancy patterns throughout the life of the installation
- Automated dimming feature along with dwell time enables for more soothing transition of light levels
- Take charge of your installation by reconfiguring the entire lighting group, or only selected luminaires
- App based commissioning offers greater flexibility to adjust the lighting settings in the workplace



### **Save energy** without compromise

In the past, saving energy meant sacrificing light or using unwanted switching. But not anymore.



SpaceWise LED luminaires with embedded wireless controls deliver scalable energy savings without compromising on visual comfort. The lighting controls allows you to configure precise zoning so that only occupied areas of your office are fully lit, while other non-occupied zones stay at a background level saving energy. Lighting can also be adjusted within zones to suit the preferences of people working in those areas, creating inviting, comfortable environments for everyone.

#### How SpaceWise works in open-plan...

Luminaires are grouped into standalone networks of up to 50 luminaires. Occupants simply fine-tune the light levels to their personal preferences. 500 lux is the typical light level required, but you may prefer to go as low as 300 lux or even higher than 500 lux. With the dwell time functonality, the light dims automatically to the background level when occupants are away from their workstations for around 10 seconds.

You can also create a defined zone within the office. The lights dim or brighten individually, based on each luminaire's occupancy and daylight sensors.

#### ...and private offices

Embedded controls in each luminaire combine presence detection and daylight-dependent dimming to save energy. Simply use the SpaceWise app to connect the wireless wall switch or scene controller to the luminaire. The wireless switch supports personal dimming preferences.

#### Dwell time feature in open plan office: one room, multiple zones

In open-plan environments, SpaceWise protects the aesthetic of the space by maintaining a background light level. Individual luminaires aren't turned off until the entire wireless zone is unoccupied. It is possible to create zones of luminaires which react simultaneously if one of the sensors detects presence.

#### When the first occupant enters, the lighting group lightens up gently to the background level of 20%.



When people leave their workstations the luminaires gently dim to background level of 20%.



Daylight-dependent dimming occurs automatically, saving even more energy throughout the day.



- It's only the occupied workstations that are lit fully when occupants remain in the detection area for more than 10 seconds, so energy isn't wasted on full-output lighting when people are just passing through the space.
- And the really clever thing about it? The background lighting dims to around 20% of its full output, but the visual appearance is so subtle, it's barely noticeable.
- As each occupant arrives at their workstation, luminaires in the immediate area brighten up to full illumination.



When people leave for meetings or lunch, significant energy is saved because all unoccupied areas dim to the background level.



The lighting zone turns off after the last person leaves.



### Open plan: **big savings,** zero compromise

The traditional way to save energy in open-plan spaces was to reduce wattage. But in retrofit projects, this often means lighting falls below recommended levels – resulting in a dreary, uninspiring environment for occupants.





Featuring dwell time functionality, SpaceWise delivers full-light output at occupied workstations, and a lower background light level at unoccupied workstations.

The aesthetic of the space is maintained with a background light level – luminaires aren't turned off until the entire zone is unoccupied.

And there's no need to provide a controls design and intent with wired zones. The controls are embedded in each luminaire.

After installation, use SpaceWise to create customized wireless zones in your open-plan room. It's as simple as that.

For open-plan offices, we recommend large groups of 30-50 luminaires. As long as presence is detected within the group, the luminaires remain at the background light level in non-occupied areas.

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#### Step-by-step: how the system works

- When the first occupant enters, the lighting group brightens gently to a background level
- As each occupant arrives at their workstation, luminaires in the immediate area brighten to full illumination, while the remaining luminaires remain at background level
- Daylight-dependent dimming then begins automatically
- When occupants leave their workstations, after 15 minutes the luminaires dim gently to the background level
- The lighting group turns off only when no-one has been in the entire group area for 15 minutes

## Private office: Custom control

Occupancy sensing and daylight-dependent dimming come as standard with SpaceWise – they're embedded in the luminaire. Just add a wireless switch and you've got total control of your lighting.





#### Design and application

In a private office, you can override the sensordetermined light levels to enjoy your preferred settings – just link the wireless switch to the group of luminaires.

The system will remember this preference during short vacancy periods, and revert to the default light output after a long vacancy period.

And if you prefer luminaires to react simultaneously to presence detection, you just create zones within the group.

#### System behavior at a glance:

- The occupant-chosen light levels can be activated with a simple press-and-hold on the wireless switch
- The system remembers the occupant-chosen light levels for 15 minutes after vacancy, so when the occupant re-enters the space, the previous manual dimming light level is restored



• Daylight-dependent dimming occurs automatically, except when the occupant overrides it manually

#### Manual On/Auto Off settings include:

- When the switch is turned on, lights quickly brighten to the task level
- When the space is unoccupied for 15 minutes, the lights dim slowly to off

#### Auto On/Auto Off settings include:

- When an occupant enters the room, the lights turn on to the task level
- When the space is unoccupied for 15 minutes, the lights slowly dim to the background level
- Lights remain at the background level for 15 minutes before turning off

## Set the scene in meeting rooms

Lighting must be flexible in meeting and conference rooms. A trainer will usually favor a well-lit space. Someone delivering an audio-visual presentation may prefer lower lighting.





SpaceWise gives you all the flexibility you need, and provides automatic daylight-dependent dimming and occupancy sensing within each luminaire.

#### **Design and application**

When using SpaceWise in a meeting room, you can adjust the lighting to suit the preferences of people working in those areas, creating inviting, comfortable environments for everyone.



#### • Manual On/Auto Off settings include:

- When the switch is turned on, lights quickly brighten to the task level
- When the space is unoccupied for 15 minutes, the lights dim slowly to off

#### Auto On/Auto Off settings include:

- When an occupant enters the room, the lights turn on to the task level
- When the space is unoccupied for 15 minutes, the lights slowly dim to the background level
- Lights remain at the background level for 15 minutes before turning off

## SpaceWise package

Whatever your office's configuration, the SpaceWise system offers sustainable, long-lifetime high quality LED lighting, whilst reducing energy and carbon impact and simultaneously enhancing the appeal of your office space.



#### **SlimBlend luminaires**

Philips SlimBlend comes in a complete family of slim square, rectangular and disc luminaires - recessed, surface and suspended – that can be used across the entire office space. This flexible approach allows you to install attractive lighting with a consistent look throughout your office building.

SlimBlend is also designed to provide comfortable, pleasant and office compliant lighting. The 'trapped' light under the luminaire's edges creates a subtle glow, delivering a soft effect ('Soft Edge') and reducing glare.



#### Wireless sensor and switches

- Up to ten OccuSwitch wireless sensors can be added to a group of SpaceWise luminaires
- Sensors have a 10 year hassle free battery life
- No sensor wiring required wireless controls eliminate the need to open the ceiling to install the sensor
- · You can connect the wireless wall switch or scene controller to the luminaire

#### SpaceWise configuration tool

The commissioning app offers simplified commissioning and greater flexibility, making saving energy easy.

- Visualize the commissioning steps on Philips apps for Android devices
- Alter sensor configuration parameters at your fingertips
- Take charge of your installation, flexibility reconfigure the entire lighting group or only select luminaires
- Save the sensor settings as a unique profile on the cloud for future access and ease of recalling what exactly was implemented

#### Features

- Each luminaire has an integrated daylight sensor which shares occupancy information over the wireless network
- Sensors can be grouped for same light behavior enabled by ZigBee wireless communication
- For adding personal control the system is compatible with a range of Zigbee Green Power dimmer switches
- Configuration and commissioning through Android smartphone app or Philips MultiOne
- Pre-defined "scenes" when using wireless



SlimBlend surface mounted



OccuSwitch wireless LRM1763/10



Switch Wall based UID8460



Switch Wall based UID8450



Commissioning App

## Extra specs, **extra benefits**

SpaceWise comes with a range of options to meet the exact requirements of your office.



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The new control system provides us with more precise zoning so that only occupied areas are fully lit while other luminaires in the network stay at background level. The dimming functionality also enables us to adjust lighting levels within the zones to suit **the preferences of the people working in those spaces."** 

Les Smith, EMEA Critical Facilities Engineering Manager Citi, Canary Wharf, London

#### Deliver room-based control, comply with energy codes

Most energy codes for new construction and major renovation projects require switches to have manual-on / auto-off functionality. Some of the more recent codes also require daylight-dependent dimming for certain spaces.

SpaceWise meets these requirements – occupancy sensing and daylight-dependent dimming are embedded in the luminaire. The SpaceWise compatible wireless switches let you configure the system according to the manual-on / auto-off requirements, while also providing dimming override capabilities.

For retrofit projects, the system lets you 'switch on' manually instead of automatically, using a wall-based switch that communicates wirelessly to the luminaires.



#### Avoid false turn-off

Some office areas have unusual barriers between the sensors and workstations, which can prevent the luminaire sensor from detecting all the workstations. But with an OccuSwitch Wireless Sensor, you can extend the occupancy coverage area of the SpaceWise luminaires to detect the entire workspace area.

Note: The external ceiling sensor is not connected to any load, so it won't regulate the lights between the task level and the background level. It will only prevent the false shut-off of a group of lights.

#### Turn on the lights before entering the space

Need to illuminate a space before people enter? Not a problem. External ceiling sensors can be installed at various entry points to detect occupants as they arrive. This way, the space is pre-lit and you avoid dark walk-ways.

## **SpaceWise uses** Zigbee protocol

ZigBee is an industry standardized wireless mesh network. ZigBee supports a large number of nodes and devices and is used all over the world as a very reliable and secure communication protocol. ZigBee is a protocol for low-data-rate wireless connectivity with fixed, portable, and moving devices.





#### Privacy aware

ZigBee protects the privacy of network users by preventing unauthorized access to the network



#### Authentication

The SpaceWise system is secured by a specific network key that is different from other ZigBee networks



#### **Operational security**

ZigBee controls access to the network's authentication and encryption, protecting all connected systems and devices

In the lighting world, ZigBee gives you total control of your LED lighting, switches and sensors. The highly secure ZigBee protocol is the backbone of Philips' wireless networked lighting systems protecting all devices on the lighting network.

## Services delivered the right way, your way

Lighting is in our DNA. We've been designing and delivering lighting installations for more than 120 years, so one thing you can bank on is peace of mind. How do we work? We're big on flexibility. We'll package our support around exactly what you need.



#### **Professional services:** pre installation

We offer help at the planning stage through our unique professional services approach by doing an initial audit and recommending a design solution to ensure best outcomes.

#### Audit

#### On-site data collection and data analysis

We make recommendations for improving performance, with a clear base line, and ensure customers receive the most up-to-date information on the lighting installation

- Lead
- Scope
- Data collection
- Data analysis

#### Lifecycle services: post installation

And post installation we offer a menu of options to choose from, with three packages, from Essential to Premium and Premium+ depending on your needs.

#### **Essential** Package

#### Protecting your investment

- Helpdesk and service ticketing
- Preventive maintenance via field support
- Corrective maintenance via remote call support
- Spare parts and additional services at discounted prices

#### **Premium+** Package Optimize performance and meet your business objectives • Everything in the Premium Package Documentation and project information in a customer portal Ongoing user training

#### **Premium** Package Ensuring hassle-free and budgeted operation • Everything in the Essential Package Comprehensive maintenance via trained service engineers for on-site service activities Spare-part kit and replacement for failures

#### Consulting

#### Solution design arising out of data analysis

We come up with most cost-effective design, incorporating data from the field, and implement the design according to customer's precise specifications

- Solution design
- Business case
- Solution implementation
- Sign off



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