Sensors

Offering the ability to interact with project spaces passively, the Philips Dynalite sensor range brings the features of motion detection, light level detection and IR receive into one unit. Each of these features can be operating at the same time, allowing automation scenarios such as turning on the lights after detecting motion and then dimming the lighting level once the available sun light has been measured, providing additional energy savings. After the area has been unoccupied for the predetermined time, the lights will then switch off. By combining each of these functions into one device, operational effciency is improved, helping reduce the requirement for many different types of sensors cluttering the ceiling space.

Each sensor has an inbuilt microprocessor, allowing for logical functions to control one small room, the door of a building or an entire building. In applications such as office buildings, lecture theatres and homes, the Philips Dynalite universal sensor can be utilised to detect motion and switch on the lights. All sensors receive their power from the DyNet network and as they are fully remotely programmable, they can be configured to automate and control virtually an unlimited number of controlled outputs.

DUS804C-UP – Multifunction Sensor

The DUS804C-UP is a 360° ceiling mount sensor that combines ultrasonic and passive infra-red (PIR) motion detection and infra-red remote control reception (IR) in the one device.

In applications such as office buildings, lecture theatres and homes, the DUS804C-UP universal sensor can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The unit also incorporates a segmented click-up bezel surrounding the PIR motion sensor element, which enables a portion of the sensing field to be readily masked to prevent nuisance detection from adjacent doorways or corridors. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement the DUS804C-UP series universal sensors are available.

- Multifunction fully programmable sensor
- All functions remotely programmable

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multifunction illumination control
- LED activation indicator
- Dimensions: 90mm diameter x Depth 26mm (exposed)
- Weight: Packed weight 0.25kg

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls

Motion Detection

PIR:

- Maximum detection range: 5.0m
- Detection area: 7.4m x 5.6m ellipse (at a height of 2.5m)
- Detection speed: 1.0m/s
- Detection object: 700mm x 500mm
- Detection zones: 64
- LED activation indicator
- Adjustable Pulse Count & Sensitivity
- Sensor: Quad element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1000MHz

Ultrasonic:

- Detection area: 8m x 16m (128m2 coverage)
- Transducer pairs: 2
- Operating frequency: 32KHz

DUS804C – Multifunction Sensor

The DUS804C is a low profile recessed flush mount 360° ceiling mount sensor that combines motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device. In applications such as office buildings, lecture theatres and homes, the DUS804C universal sensor can be utilised to detect motion and switch on the lights.

When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The unit also incorporates a segmented click-up bezel surrounding the motion sensor element. This enables a portion of the sensing field to be readily masked to prevent nuisance detection from adjacent doorways or corridors. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS804 series universal sensors are available. In situations where it is critical to maintain precise lighting control for individual workspaces, such as an office workstation or even air traffic control centres, the DUS804C facilitates light compensation. The DUS804C can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

The DUS804C sensor has additional optional accessories that allow it to be surface mounted when required.

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multifunction illumination control
- LED activation indicator
- Adjustable pulse count and sensitivity
- Sensor: Quad element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-10,000MHz
- Dimensions: Diameter 72mm x D 26mm
- Packed weight: 0.116kg

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Motion Detection

Available in two sensitivity levels:

DUS804C – Standard

- Maximum detection range: 5.0m
- Detection area: 7.4 x 5.6m ellipse (at a height of 2.5m)
- Detection speed: 1.0m/s
- Detection object: 700mm x 500mm
- Detection zones: 64

DUS804C-SM – Slight Motion

- Maximum detection range: 2.0m
- Detection area: 5.0m circular (at height of 2.0m)
- Detection speed: 0.5m/s
- Detection object: 200mm x 200mm
- Detection zones: 104

DUS704C – Multifunction Sensor

The DUS704C sensors combine motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device.

In applications such as homes, lecture theatres, car parks and office towers, DUS704C universal sensors can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS704C universal sensors are available. In situations where it is critical to maintain precise lighting control for individual workspaces, such as a flight control tower or office workstation, the DUS704C facilitates light compensation. The DUS704C can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remote or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Wide Angle 360º Ceiling Mount

- PIR motion detector
- Detection range 9m x 6m ellipse
- Mounting height: 2.1m to 5.0m (2.4m optimum), on ceiling
- LED activation indicator
- Adjustable pulse count
- Adjustable sensitivity
- Detection zones: 34 dual element zones
- Sensor: Dual element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1,000MHz

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multi-threshold illumination control
- Dimensions: Diameter 102mm x D 30mm
- Packed weight: 0.116kg

DUS704W – Universal Sensor

Infra-red Remote Control Receiver

- Range >6m
- LED activation indicator
- Can be used with DTK500 series infra-red remotes or other learning IR remote controls
- Multifunction fully programmable sensor
- All functions remotely programmable

Wide Angle Wall Mount PIR Motion Detector

- Detection range 12m x 90[a]
- Mounting height: 1.1m to 3.1m, on wall or corner
- LED activation indicator
- Adjustable pulse count
- Adjustable sensitivity
- Detection zones: 20 dual element zones
- Sensor: Dual element pyro-electric
- R.F.I. Immunity: >15V/m @ 10-1,000MHz
- Optional lens: 30m narrow long range and 15m curtain

PE Cell for Light Measurement

- Dynamic range <5 lux to >5,000 lux
- Automatic "Daylight Harvesting" mode
- Standard functions for proportional and multi-threshold illumination control
- Dimensions: H 85mm x W 66mm x D 45mm
- Packed weight: 0.116kg

The DUS704W wall-mounted sensor is available with an adjustable bracket for mounting and aiming the desired detection zone.

Combining motion detection (PIR), infra-red remote control reception (IR) and ambient light level detection (PE) in the one device makes this sensor suitable for applications such as single office spaces, stair way landing, hall ways, meeting rooms, class rooms and data centres. DUS704W universal sensors can be utilised to detect motion and switch on the lights. When rooms are unoccupied, lights can be automatically dimmed or switched off to provide energy savings. The same sensor provides IR control reception to enable full remote control over lights, audio-visual equipment and blinds. A range of hand-held infra-red transmitters to complement DUS704W universal sensors are available. In situations where it is critical to maintain precise lighting control for individual workspaces, the DUS704W can also be placed in an automatic "Daylight Harvesting" mode for energy savings.

Available with two lens options of wide angle with a motion detection range of 12M x 90° or long range 30M x 30°.

DTS900 – Temperature Sensor

The DTS900 measures ambient temperature then provides the captured data to other devices on a DyNet network, such as relay controllers used to switch heating and cooling plants. The thermostat set points can be adjusted through some of the Philips Dynalite interfaces such as the colour touchscreens or DR2P panels with OLED screens. These devices can also be used to show what temperature the sensor is currently reading in real time.

The DTS900 incorporates filtering and hysteresis to provide compensation for rapid temperature fluctuations to prevent pulsing of the airconditioning unit. The unit also supports visual feedback features such as an LED indicator that provides the status of the device. The DTS900 is also available with a user-adjustable temperature set point knob (DTS900M).

The DTS900 measures ambient temperature and provides data to other devices on a DyNet network, such as relay controllers used to switch heating and cooling plants. High and low set points are configured using EnvisionProject commissioning software or can be dynamically set via other Philips Dynalite devices, such as the DTK600 touchscreen. Conversely, the touchscreen can also be used to interrogate the DTS900 and to display the current temperature in real time.

The DTS900 incorporates filtering and hysteresis to provide compensation for rapid temperature fluctuations.

- Measures ambient temperature, provides data to other controllers
- Range 0° to 50°C, accuracy +/- 1°C
- Bi-colour LED status indicator
- Also available with user-adjustable set point knob (DTS900M)
- Dimensions: H 71mm x W 71mm x D 26mm
- Packed weight: 0.11kg