

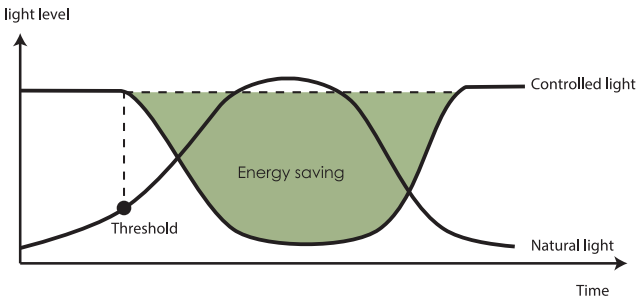
Introduction

AcTEC's daylight sensors precisely monitor surrounding light levels. As part of a AcTEC lighting and energy saving solution, daylight sensors automatically adjust light levels to a user-defined level. Daylight sensors are suitable for installation in rooms with windows and open spaces receiving natural light.

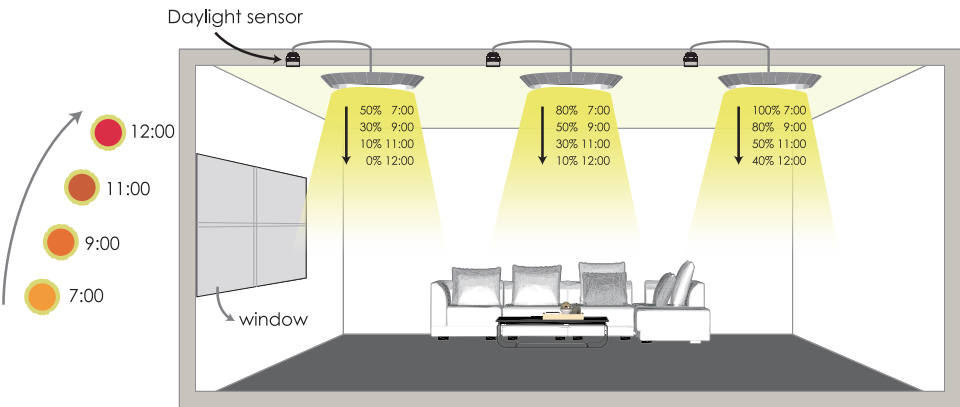
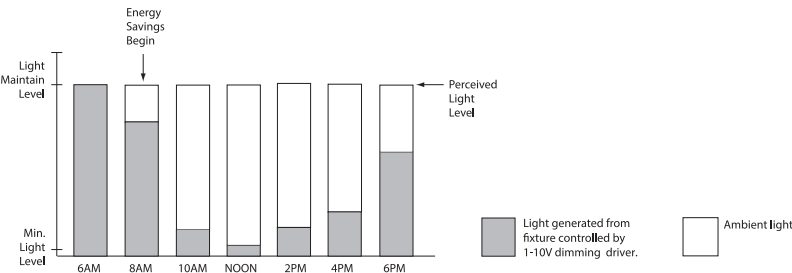
A daylight sensor has to work with a compatible dimmable ballast or LED driver. The daylight sensor would transform the light signal into electrical signal (1-10V) that would be fed into dimmable ballast or LED driver. Hence, the ballast or driver would automatically make the light brighten or dim according to how much light the Sensor detects.

Daylight Harvesting

With daylight harvesting, natural light in-room supplements artificial light so as to keep a constant lighting level while simultaneously saving energy. This ensures unnecessary overhead lighting remains dimmed or OFF. This constant level is programmed into a compatible control device. Once hardwired to Daylight sensors, the control device receives Photocell's real-time light measurement and maintains a steady level of light within daylight sensor's area of detection.



Natural & Controlled light interactive diagram



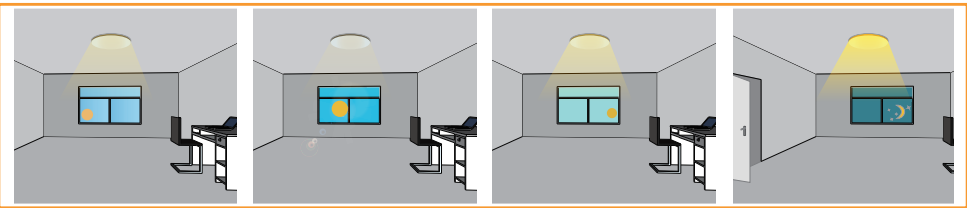
Benefits

- AcTEC lighting control products provide convenient, automatic hands-free daylight harvesting.
- Constant lighting at the optimal level for greater visual comfort and acuity, which contributes to improved productivity.
- Lowers electric bills when natural light is also present.
- Lumen maintenance opportunity compatible.

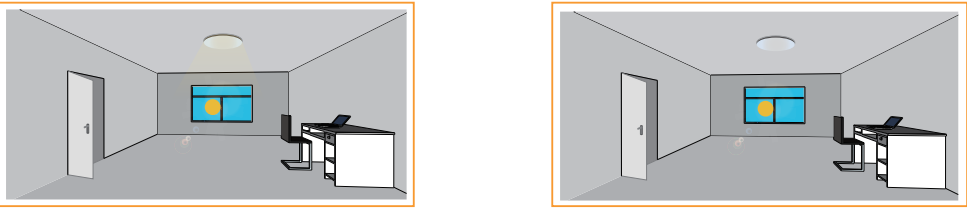
Product Features

- High sensitive light sensor inside.
- Detect environmental luminance and dimmer automatically.
- Adjustable daylight sensor threshold.
- Wide detection area.
- Compatible with 1-10V dimming driver and microwave sensor.
- Compact size to suit various luminaires.
- Easy to install and various installation methods.

Daylight sensor (SL01A) + 1-10V control gear



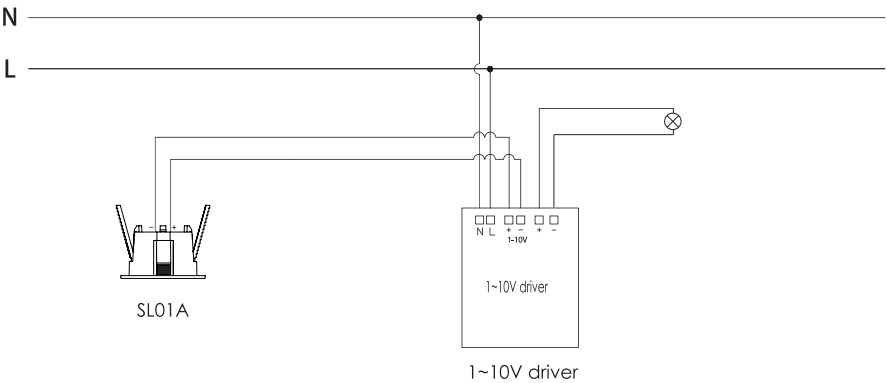
The lamp dims to 10%-100% illumination according to the level of ambient light.



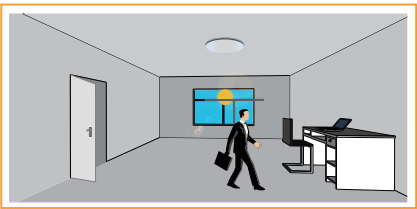
When the level of natural light is high,the lamp dims to minimum level but never turn off.

The lamp can be manually switched off .

Wiring Diagram



Daylight sensor (SL01A) + ON-OFF function sensor (SM02) + 1-10V dimmable ballast or LED driver



The lamp turns off when ambient light is higher than preset illumination level (Set by SL01A daylight sensor).



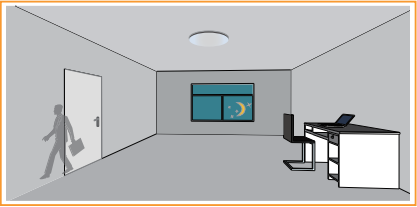
The lamp switches on when ambient light is lower than preset illumination level and motion is detected.



The lamp dims to 10%-100% illumination according to the level of ambient light.

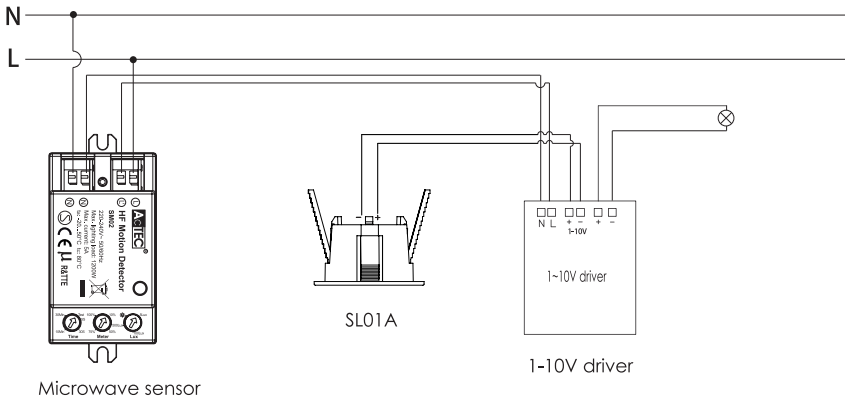


When the level of natural light is high,the lamp dims to minimum level but never turn off.



The lamp switches off after hold time when motion is not detected.

Wiring Diagram



Technical Data

Model No.	SL01A
Control voltage	1~10V
Ambient light threshold	10~500lux
Control line	red + black -
Operating temperature	-20~+50°C
Viewing angle	90°
Fixing centre D	φ 20mm
Cable length	70cm
Max. permitted cable length	20m
IP rate	IP20
Max. output control current	50mA
Max. number of ECG	40 pcs

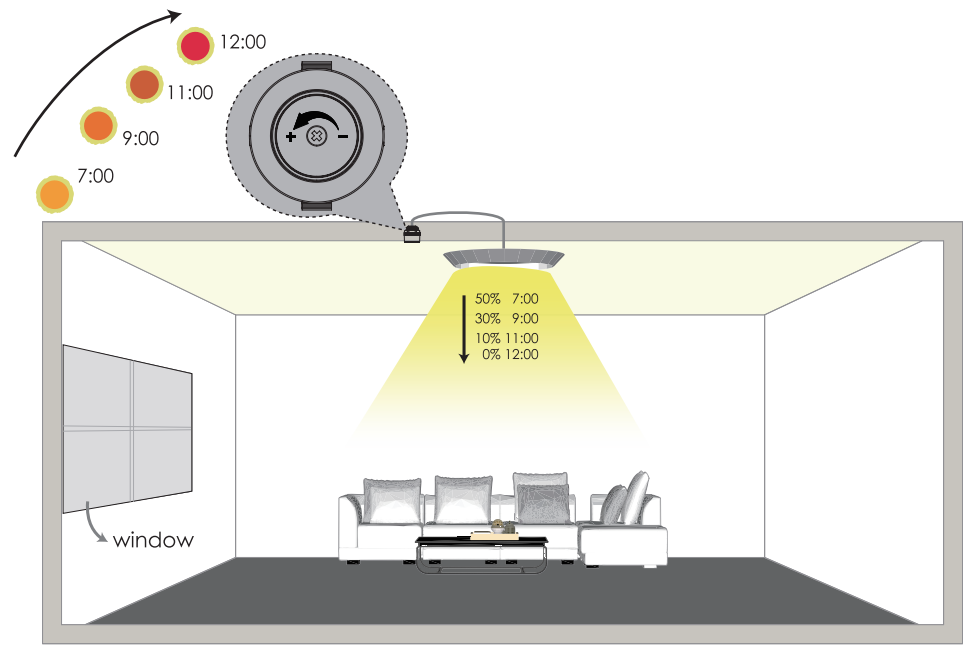
Setting

- Rules of operation

Measured light level < Light Maintain Level
Measured light level = Light Maintain Level
Measured light level > Light Maintain Level

Action: Lights are brightened
Action: lights remain constant
Action: Lights are dimmed

- The light maintaining level is set through the adjustment of the potentiometer.



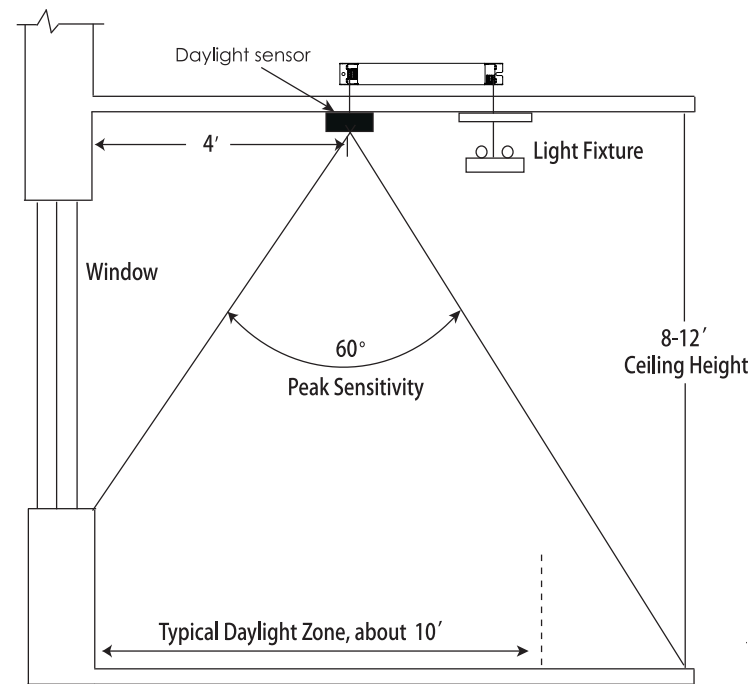
Installation

How to install effectively:

- The photocell measures light from any sources in the visible spectrum within a 60-degree cone at an 8 to 12 feet mounting height.
- Pick an appropriate Day-lighting Zone
 - i. A good rule of thumb is 1.5 times the height of the windows.
 - ii. Areas around skylights.
 - iii. Areas with highly reflective flooring and walls.
- Be aware of the natural or artificial lights in the area .
 - i. Don't point the photocell toward any windows. The photocell is designed to measure the light that is reflected off the floor.
 - ii. Don't point the photocell toward any artificial lights
 - iii. Locate the photocell away from any emergency lights or light fixtures that focus light toward the ceiling, if the photocell must be near a fixture like this, the adjustment knob will need to be turned anti-clockwise for adjustment of light threshold (increase light threshold).

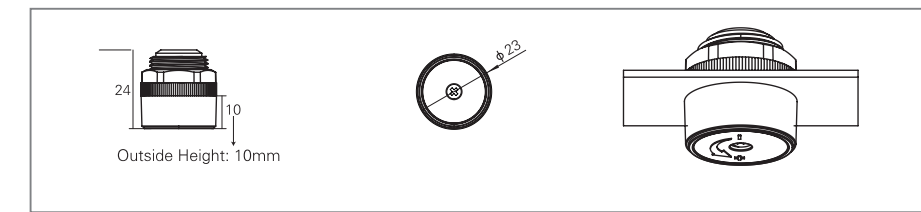
Daylight sensor Placement

The daylight sensor can be mounted on ceiling with a surface mount or low-profile flush mount. It provides continual measurements of the space's lighting levels – the total photo-metric light from daylight or any light sources.

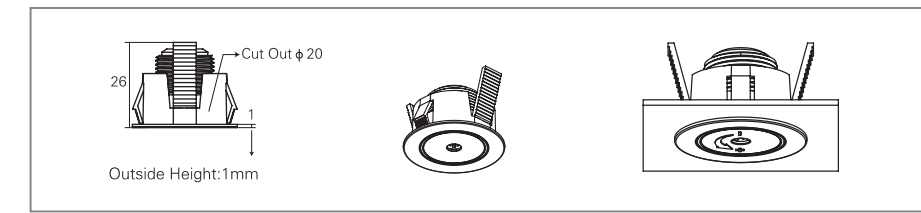


- The daylight sensor may be installed directly above workspace.
- By connecting the daylight sensor to 1-10V dimming ballasts or led driver, it can provide to the workspace with an ultra-convenient, hands-free lighting control that maintains a constant and even ambient lighting level.

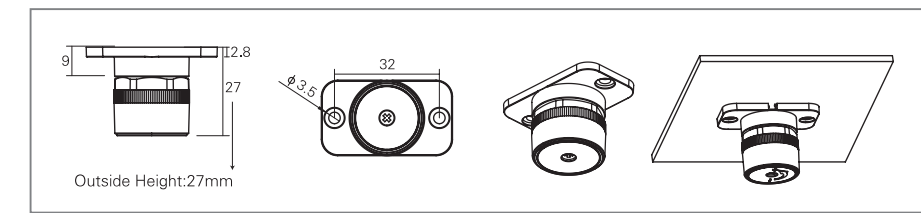
Dimensions(mm)



Nut Lock Installation



Recessed Installation



Surface-mounted Installation