

Dual Sensor for Brightness
and Temperature
AP 254 LCP 3000EZ
Data Sheet



product GUIDE



SIEMENS

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Dual Sensor for Brightness and Temperature

AP 254

5WG1254-3EY01



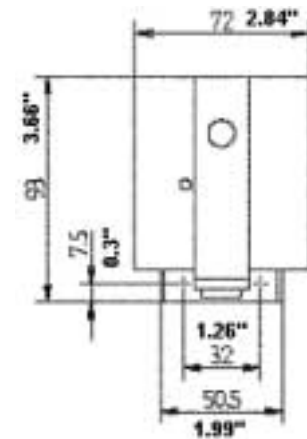
This device controls load switches, dimmers and blinds / shutters based on threshold light for ambient light level and outdoor temperature.

The Dual Sensor AP 254 is suitable for these applications:

- Multi-staged lighting controls
- Temperature controls e.g. control of electric band heaters for frost protection

Special customized applications include:

- Glass house controls
- Awnings / blinds / shutter controls
- Systems with visualization of light level and outdoor temperature



• **Dimensions:** Dimensions in mm and inches

Product Description

The Dual Sensor AP 254 provides ambient light level and outdoor temperature values. These values can be sent onto the bus.

Technical Specifications

POWER SUPPLY (VIA BUS)

Class 2 via bus line, 24V DC.
Operating voltage: 21V DC - 30V DC

POWER CONSUMPTION

Less than 150 mW

MEASUREMENT RANGE:

Light level: 0.09.... 9300 Foot-candle (1... 100 000 Lux), ± 5 Lux or. $\pm 20\%$
Temperature: -13°F.... 131°F (-25...55°C), ± 1 or $\pm 5\%$
The higher value of tolerance is applicable.

APERTURE

Horizontal +/- 60°
Vertical -35°... +66,5°

OPERATOR ELEMENTS

1 learning button: for switching between normal operating mode and addressing mode.

DISPLAY ELEMENTS

1 red LED: for monitoring bus voltage and displaying mode, selected with the learning button.

CONNECTIONS

Bus line, screw-less bus connection block

PHYSICAL SPECIFICATIONS

Housing: Polymer

CONNECTIONS

Bus line, screwless bus connection block

PHYSICAL SPECIFICATIONS

Housing: Polymer

RELIABILITY

Reliability: 99.96% based on 1,000,000 units/10 years of operation.

ELECTROMAGNETIC COMPATIBILITY

Complies with Part 15 of the FCC rules pursuant to the limits for a Class A digital device.

ENVIRONMENTAL SPECIFICATIONS

- Ambient temperature operating: -13°F... 131°F (-25... 55°C).
- Ambient temperature non-op.: -13°F... 158°F (-25... +70°C)
- Relative humidity (non-condensing): 5% to 93%.

LISTINGS AND CERTIFICATIONS

EIB certified

CE norm
Complies with EMC regulations (residential and nonresidential buildings), and low voltage regulations

Installation Instructions

When determining the installation location consider:

- Protecting the dual sensor from dust and grime. A dirty sensor inhibits the light level measurement.
- Direct exposure of the sensor to sun light which will impact the temperature measurement.

Operator Elements



B1 Learning button for switching between normal mode and addressing mode.

B2 LED for indicating normal operating mode (LED off) and addressing mode (LED flashes); upon receiving the physical address the device automatically returns to normal mode and the LED is turned off.



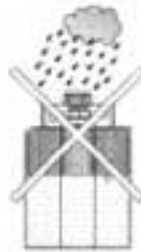
WARNING

- The device must be mounted and commissioned by an authorized electrician.
- The prevailing safety and installation rules must be heeded.
- The device must not be opened. A device suspected faulty should be returned to the local Siemens office.

Mounting and Wiring

Warning:

Mount the Dual Sensor in a vertical position only!



Consequences of false installation:

Moisture and/or dust can get into the device! Device failure and short circuiting of the bus line are potential consequences.



Connection of bus line

Bus connection

- Untighten the screw for the protective cap.
- Remove the protective cap.
- Push the bus wire through the bushing into the bus connection block space.
- Watch the polarity (black on black; red on red) when connecting the bus wire to the bus connection block!
- Push the bus connection block fully down.
- The LED flashes.

The LED on an operational device stops flashing 10 seconds after bus voltage has been applied or a valid application program was downloaded into the device. Otherwise an invalid application program was loaded.

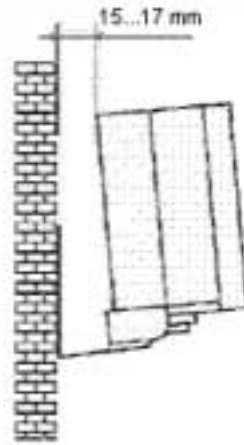
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Mounting and maintenance of the protective cap

Mounting the protective cap

- Place the protective cap over the installed device.
 - Lock the cap by tightening the screw.
- ### Maintenance of the protective cap
- Clean the protective cap regularly to avoid false readings of the light level due to dust and grime.
 - Use a damp cloth.



Aperture and inclination of the sun

When installing the device south of the 47th latitude (Berne, Graz) it is beneficial to tilt the device upwards to compensate for the higher inclination of the sun. During installation of the mounting bracket tilt the mounting bracket towards the mounting surface such that the distance between the upper edge of back of the device and the mounting surface (e.g. building wall) is 15... 17mm (0.6...0.67")

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