Analog Photosensor

Overview
The Analog Photosensor is a system accessory for Greengate Lighting Control Systems. It allows control of lighting levels based on how much natural light is present.

Features
- Supplies network lighting control panels with analog input
- Indoor and outdoor ranges
- Wide and narrow sensing heads
- Color compensating
- Light level readings and thresholds are available to all panels on the network
Specifications

**Operating Environment**
- Temperature: -40°F to 158°F (-40°C to 70°C)

**Sensor Type**
- Blue-enhanced photodiode

**Sensor Range**
- **Daylighting Sensors - used with CKM, CKT & CK4A**
  - **Lighting Control Panel**
  - **Standard FC Range**
    - PC-I: Indoor 0-100 FC*
    - PC-O: Outdoor 0-250 FC*
    - PC-A: Atrium 2-1000 FC*
    - PC-S: Skylight 10-2000 FC*
  - **Daylighting Sensors - used with Daylighting Controller**
    - **Standard FC Range**
      - DLC-PD-IN: Indoor 0-100 FC*
      - DLC-PD-OT: Outdoor 0-250 FC*
      - DLC-PD-AT: Atrium 2-1000 FC*
      - DLC-PD-SK: Skylight 10-2000 FC*

**Input Voltage**
- 24 VDC

**Output Voltage**
- 10 VDC full output

**Output Offset**
- 0 VDC or 1 VDC analog - total darkness

**Wiring**
- Three conductors 18 gauge standard cable
  - Red: Pos. DC input
  - Black: DC common
  - Yellow: Output

*Other FC ranges available by special order. Please contact Technical Support for more information.

Description/Operation

Photosensors use a lens to gather light energy and provide an electrical signal to a controller device that is proportional to the measured light level. The controller adjusts the artificial light contribution based on the light level measurement. The sensor sensitivity is fixed and based upon the sensor range selected.

Installation

This system accessory will require mounting and wiring at the site. Outdoor photosensors should be mounted on the roof facing north and not pointing at any artificial light source. Indoor photosensors should be mounted in the space they are controlling and located as to not have any direct artificial light contribution. No adjustments are made at the photosensor. Switching thresholds are set remotely at the controller or via software.
Wiring Diagrams

Daylighting Sensors - used with Greengate Lighting Control Panel

Lights controlled by occupancy and daylight

Daylighting Sensors - used with Daylighting Controller

Lights controlled by daylight
Ordering

This is an accessory for the Greengate ControlKeeper Lighting Control Systems. It is not an integral part of the system. There is no factory assembly needed.

### Daylighting Sensors - used with Greengate, CKM, CKT & CK4A Lighting Control Panels

<table>
<thead>
<tr>
<th>Cat #</th>
<th>Description</th>
<th>Standard FC Range</th>
<th>Lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-I (Indoor)</td>
<td>Downward</td>
<td>0-100 FC*</td>
<td>Clear Fresnel</td>
</tr>
<tr>
<td>PC-O (Outdoor)</td>
<td>Horizonat</td>
<td>0-250 FC*</td>
<td>Clear Flat</td>
</tr>
<tr>
<td>PC-A (Atrium)</td>
<td>Horizonat</td>
<td>2-1000 FC*</td>
<td>Opaque Dome</td>
</tr>
<tr>
<td>PC-S (Skylight)</td>
<td>Upward</td>
<td>10-2000 FC*</td>
<td>Dark Dome</td>
</tr>
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### Daylighting Sensors - used with Daylighting Controller

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* - Above sensors require daylighting controller (DLC-PDC) and switchpack.