GLS-LCCT

Crestron SolarSync™ Outdoor Daylight and Color Temperature Sensor

- *Measures true color temperature and intensity of any lighting source[1]*
- *Enables indoor lighting to be regulated to match actual natural sunlight outdoors*
- *IP67 rated for rooftop and other outdoor installations*
- *Self-heating to prevent snow and ice buildup*
- *Also suitable for a variety of indoor applications*
- *Reports correlated color temperature (CCT) and illuminance (lux) consistent with CIE 1931[1]*
- *Reports RGB (Red, Green, Blue) and HSV (Hue, Saturation, Value) to recreate the detected color*
- *Lifetime-calibrated with no drift over time or temperature*
- *Connects to a Crestron® lighting control system via Cresnet®[2]*
- *24 Volts DC powered via the Cresnet bus*
- *1/2 in. knockout mountable to any j-box or weatherproof enclosure*

The Crestron SolarSync™ Outdoor Daylight and Color Temperature Sensor (GLS-LCCT) enables the ability to regulate indoor lighting to match the intensity and color temperature of actual daylight outdoors. A single SolarSync™ sensor installed on a building's rooftop measures the exact correlated color temperature (CCT) and illuminance (lux) of the natural daylight, and reports it to a Crestron® lighting control system. Accordingly, the control system adjusts the indoor RGB lighting fixtures to simulate the effect of being outdoors.

SolarSync sensors may also be deployed indoors to sense the light output from artificial lighting sources, allowing fixtures to be precisely adjusted to achieve a specific desired effect, or to correlate lighting conditions between separate spaces. The ability to adjust both the intensity and color temperature of indoor lighting to specific values can be utilized to positively influence the circadian rhythms of nighttime workers in an office or manufacturing facility, or to aid healing patients in a medical or psychiatric facility. It can also be employed to benefit the experience of patrons in a public mall, museum, casino, or theme park.

The GLS-LCCT is a calibrated color temperature and intensity sensor capable of achieving exact measurements consistent with CIE 1931 2° Standard Observer color coordinates.[1] It is composed of a compact, IP67 rated housing with acrylic dome, suitable for installation indoors or outdoors. Built-in heating elements prevent snow and ice from accumulating on the dome to ensure reliable operation year-round.

The GLS-LCCT is 24 Volts DC powered and energy-efficient, requiring just 70 mW in warm weather and a maximum of 5 Watts when heating itself. Power and communications are provided via a Cresnet® connection to the lighting control system.[2]

Specifications

Light Sensing

Sensor Technology: Multi-Spectral Sensing Engine; measures color temperature and illuminance consistent with the CIE 1931 2° Standard Observer color coordinates

Correlated Color Temperature: 2,000K to 25,000K[1]

Light Sensitivity: 0 to 100,000 lux (0 to 9,290 foot-candles)

Field of View: 360° semispherical

Communications

Cresnet: Cresnet slave mode

Connections

NET: (1) Attached 3 ft (0.91 m) cable with (4) flying leads, color-coded for connection to the Cresnet control network[2];

Wire Gauge: 24 AWG (0.25 mm^2)

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Crestron Electronics Inc.
15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041

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Indicators

(1) Bi-color red/green LED (visible through dome) for setup

Power

Cresnet Power Usage: 5 Watts (209 mA @ 24 Volts DC)

Power Consumption: 70 mW typical;

4.9 Watts maximum when self-heating

Construction

Housing: PTFE with acrylic diffused dome, white finish, IP67 rated

Mounting: Mounts to an electrical j-box or enclosure (not included) via a 1/2 in. conduit knockout (0.885 in. (22.5 mm) actual hole size)

Environmental

Temperature: -4° to 185° F (-20° to 85° C)

Humidity: 10% to 90% RH (noncondensing)

Ingress Protection: IP67 rated per IEC/EN 60529, dust tight and waterproof

Heat Dissipation: 17 BTU/hr maximum

For indoor/outdoor use; includes thermostatically controlled internal heating elements to prevent accumulation of ice or snow on the dome

Dimensions

Height: 2.77 in. (71 mm)

Diameter: 2.69 in. (69 mm)

Protrudes 1.85 in. (47 mm) from the mounting surface

Weight

5.0 oz (142 g)

Compliance

CE

Models & Accessories

Available Models

GLS-LCCT
Crestron SolarSync™ Outdoor Daylight and Color Temperature Sensor

Available Accessories

CSP-LSP
Cresnet® Lightning Strike Protector

CRESNET-NP-TL-SP1000
Cresnet® Control Cable, Non-Plenum, Teal, 1,000 ft (304 m) spool

CRESNET-P-TL-SP1000
Cresnet® Control Cable, Plenum-Rated, Teal, 1,000 ft (304 m) spool

Notes:

1. The sensor is factory calibrated to achieve highly accurate CCT measurements from 2,700K to 5,700K. Values outside this range may vary by a few hundred K or more.
2. When the GLS-LCCT is installed outdoors, it is recommended to install a Cresnet Lightning Strike Protector (model CSP-LSP, sold separately) at the point of entry to the building to prevent electrical surges due to lightning strikes from reaching indoor devices over Cresnet. First note.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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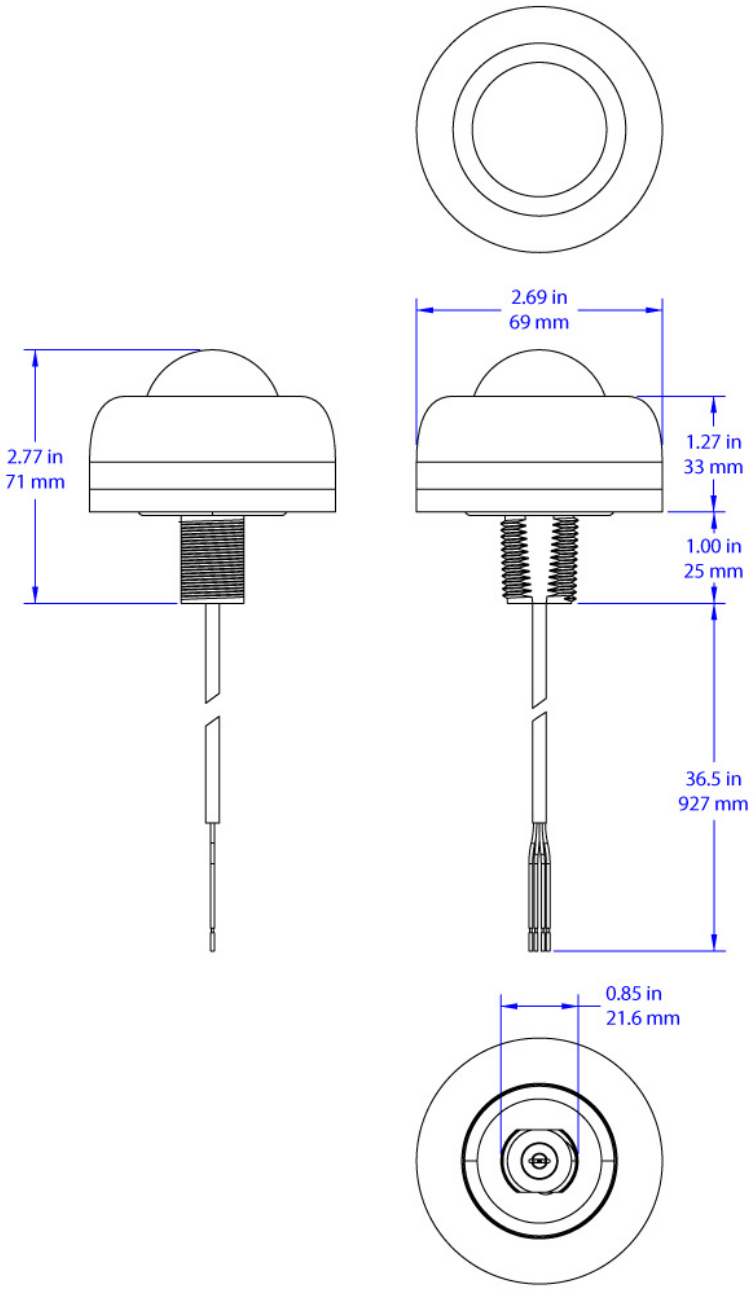

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