Wireless Lighting Controller Trilliant®

SLC-3100

The SLC-3100 is an intelligent wireless lighting controller with exceptional fault tolerance and a multitude of features. The SLC-3100 provides intelligent ON/OFF switching, dimming control, optional GPS, highly accurate power metering, analog and digital sensor inputs, and constant status and health monitoring of your lighting fixtures.

Key Features

Photocell in Every Controller

The photocell functionality operates immediately upon installation without minimal dependency on the network.

GPS in Every Controller

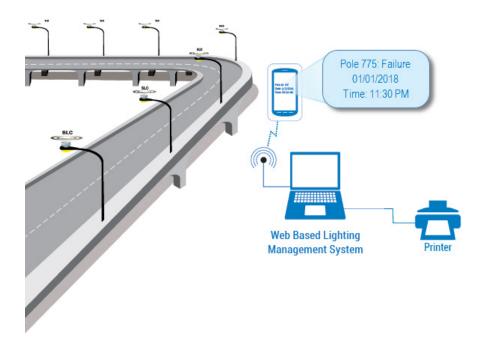
The GPS capabilities reduce install times and eliminate future mapping issues. GPS coordinates for each SLC are sent automatically to a Central Management System for overlay on a Google Maps interface. Trilliant SLCs can be ordered with an optional GPS radio. Without GPS, installers have the option to record the pole ID, SLC ID and its Latitude/Longitude location to map them correctly, by using a mobile app available for Apple iOS and AndroidTM.

Extended Surge Protection

CATB surge protection is standard, while CATC surge protection is available as an option.

Full ANSI C136.41 7-pin Dimming Receptacle Support

The SLCs work with any lamp type or manufacturer with full support for all 7 pins on the ANSI C136.41 dimming receptacle for true plug and play installation. Additional controllers (optional) support the addition of digital or analog sensors, such as motion, vehicle counts or environmental sensors through pins 6 and 7.





4.53 in. W x 2.68 in. H 115 mm W x 67.98 mm H

Trilliant SLC-3100

Revenue Grade Energy Metering

SLCs monitor current, voltage, frequency, power factor, kW and kWh, and offer metering accuracy as high as 0.5% (optional) for accurate consumption data and billing.

Remote Control and Scheduling

SLCs support multiple lamp control modes such as user configurable ON/ OFF/DIM schedules programmed on a daily / monthly / special events basis, local ad-hoc control, photocell and astro-clock scheduling, and mixed mode scheduling incorporating sensor inputs.

Flexible Dimming Control

SLCs support dimming through 0-10 VDC, PWM or DALI interfaces.

Fault Monitoring

SLCs provide extensive fault monitoring to report on day burners, burnouts, lamp cycling, ballast failures, over/under voltage, abnormal power consumption, low power factors, communication failures and more. All faults are sent to a Central Management System for alarm routing, visualization and fault correction. Alerts can be sent directly to relevant users via emails immediately when they occur. Alerts are time stamped and contain key parameters associated with the fault/alarm.



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SLC-3100-SM TECHNICAL SPECIFICATIONS

Controller Powerful 32-bit microcontroller

Real Time Clock Battery-backed RTC

Power Metering Parameters measured: voltage, current, power factor, frequency, kW and kWh

Rate Load 1560VA 960 W

Power Supply Universal AC input 85 V to 264 V, 50/60 Hz (305 and 480 V optional)

Radio Communication RPMA®: Random Phase Multiple Access

Radio: RPMA 2.4 GHz DSSS

Load: up to 25,000 streetlights per RPMA AP

Receiver Sensitivity: -133 dBm Outdoor range: up to 12 miles

Data Protection: 128-bit AES encrypt

Link Budget: 172 db

Deployment: Non-line of sight capable

Part Number: SLC-3100-T-TRL

GPS Module Specification (Optional)

Receiver Type: 22 Tracking/66 Acquisition Channel GPS Receiver GPS L1, C/A Code

Max. Update rate: 10 Hz

Sensitivity: Tracking: -165 dBm

Reacquisition: -160 dBm Cold starts: -147 dBm

Time-To-First-Fix: Cold starts: 31s (typical)

Warm starts: 30s
Hot starts: <1s

EPO Assist: 13s (CTTFF)

Accuracy: Automatic Position3: 2.5 m CEP

Speed: 0.1 m/s

Dimming Interface Control Voltage: 0-10 V with Short Circuit protection Maximum Current: 10 mA

or

PWM Dimming: 10 V p-p, 400 Hz

Maximum Current: 10 mA (Sink)

Optional Sensor Inputs Provision of one Digital input and one Analog input that can be used for motion-based lighting

controls, adaptive lighting or advanced lighting controls

Surge Protection Standard: 445 Joule CATB (6 kV/3 kA), Optional: 700 Joule CATC (20 kV/10 kA)

Operating Conditions -40C to +75C / -22F to +158F 20% to 90% Rh non-condensing; IP66

Central ManagementSystemWeb-based software allows remote configuration, monitoring, control, and reporting

