



LED Lighting Control

Sentinel C Wireless Control System

Catalog number:
Type:
Notes:

FEATURES & SPECIFICATIONS

Intended Use

Designed to provide a robust and cost effective way to wirelessly control your entire streetlight network.

Summary

The Relume Sentinel C RF Wireless Lighting control system is a complete RF transceiver and data modem for operation in the unlicensed part 900 UHF band. The system uses existing wireless infrastructure to communication bi-directionally with HID or LED style lights.

Status/error Reporting

The Sentinel C system is capable of monitoring the operating characteristics of the fixture and reporting real/historical energy consumption, fixture errors, operating mode, burn time, and maintenance issues.

Lamp Control

Each lamp or fixture can be controlled ON, OFF or DIM with up to 6 operations per 24 hour period. There are 8 dim levels between full ON and full OFF.

General Specifications

Dimensions: 3" x 3.5" x 1.75"
 Ambient temperature: -40 to +70 deg C
 Relative Humidity: 90% at 60 deg C
 Altitude: 15,000 ft
 Antenna: Internal. (External antenna version available as option.)
 Maximum number of Field Units per USB transceiver: 256
 Voltage: 105-305 VAC. 347-480 VAC version 4th quarter 2012.
 Meets UL773A and ANSI C136.24. RoHS compliant.

Ordering Information

Lead times will vary depending on options selected.
 Consult with your sales representative or contact Relume at 248.969.3800. Fax us at 248.969.3804



You Own the Data and the Network:

- Digital address for each light on the network
- Physical street address
- GPS coordinates (latitude/longitude)
- Lamp name, description, and pole number
- Lamp manufacturer and model number
- Current operating condition
- Current and historical energy usage
- Burn time
- Line voltage
- Maintenance history



Warranty

Relume guarantees unsurpassed quality by offering an industry leading 7 year limited warranty. Contact Relume for complete warranty language, exceptions, and limitations.





LED Lighting Control

Sentinel C Wireless Control System

FEATURES

Sentinel C system operates as follows.

- a. Up to 256 field units per single USB transmitter
- b. Automatically sets up and maintain mesh communication.
- c. Physically Inter-lapping or adjacent systems will not create interference problems.
- d. ON/OFF control of all field units within 10 seconds of command from USB transmitter.
- e. Field Unit Defaults to photocontrol operation if no communication is received from USB transmitter. As an option, Field Unit will default to always ON if there is not communication.
- f. Confirmation from field unit to computer within 60 seconds of executing ON/OFF command.
- g. Field unit has photocontrol (Light/dark) monitoring.
- h. Field unit measures input Volts, fixture watts & current, ON/OFF operation. Power monitoring accuracy shall be +/-2% over temperature and voltage range of:
 - -40 to +70 C
 - 50 to 1000 watts
 - 105-305 VAC 60 hertz
 - Power factor of 0.3 to 1.0
- i. Field unit transmits monitored data to host computer at least once per day. Field unit controls and monitor any HID, LED, Induction, incandescent, or LPS load commonly used on parking or retail lot fixtures. It will also operate sign lighting up to 1000 watts.
- j. Operation from 105 to 305 VAC at -40 to +70 C. ambient including full sunloading at 40 C ambient.
- k. Field unit is capable of switching up to 12 amps LED, HID or other load for at least 10,000 operations. Note: At 277 VAC, LED or electronic ballast load inrush will be up to 140 amps.
- l. Notification of "I'M LOST" build into computer software. This alerts used if a field unit become electrically inoperable, loses power or is physically removed.
- m. Unlicensed, 900 mhz used for communication
- n. 64 bit or better encryption on transmitted data
- o. Field unit to field unit communication: 1/4 mile clear line of sight, 1/8 mile thru wet trees or 40 feet including penetration of 10" reinforced concrete.
- p. USB transceiver to field unit communication: 1/4 mile clear line of sight or thru frame structures. 40 feet including penetration of 10" reinforced concrete.
- q. Field unit is in a plastic enclosure with 1/2" threaded nipple for mounting. Leads exiting nipple are as follows:
 - Black = Input Line
 - White = Common
 - Red = Output Load
 - Violet and Grey = dimming, if used
- r. Field meets UL773A, ANSI C136.2 600 volt class, applicable sections of ANSI C136.24 and C136.37. Also applicable parts of C136.10 excluding the Locking Type mechanical design.
- s. Surge withstand Test: 6KA at 20KV surge repeated 5 times at one minute intervals applied between LINE and COMMON input.
- t. Field unit housing is designed for:
 - 7 years in full sunlight
 - 0.5 ft-pounds of impact at -20 C
 - UL 94VO flame rating
 - Have 8" of #18 gauge, 600 volt, 105 C, MTW or similar wires exiting sealed mounting nipple.
 - Black, gray and bronze colors are standard. Other optional.

