

iSLC-3100-7P-N



CIMCON's Plug & Play Wireless Lighting Controller (iSLC) with LTE-M/NB-IOT Cellular Modem, Remote Monitoring, Dimming, GPS, Metering and Sensor Input Capabilities

Technical Data Sheet

CIMCON's iSLC3100-7P-N is an intelligent wireless lighting controller with exceptional fault tolerance and a multitude of features. Each iSLC3100-7P-N provides intelligent ON/OFF switching, dimming control, GPS, highly accurate power metering, analog and digital sensor inputs and constant status and health monitoring of your lighting fixtures.

Key Features of the iSLC3100-7P-N

A Photocell in Every Controller

CIMCON's iSLCs operate immediately upon installation without dependency on the network.

A GPS in Every Controller

CIMCON's GPS capabilities reduce install times and eliminate future mapping issues. GPS coordinates for each iSLC are sent automatically to the Central Management System for overlay on a Google Maps interface. Without GPS, installers must manually record the pole ID, iSLC ID and its Latitude/Longitude location to map them correctly.

Extended Surge Protection

CATC (20kV/10kA) is the standard surge protection.

Full ANSI C136.41 7-pin Dimming Receptacle Support

CIMCON's iSLCs 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. CIMCON's controllers support the addition of digital or analog sensors, such as motion, vehicle counts or environmental sensors through pins 6 and 7.

Revenue Grade Energy Metering

CIMCON's iSLCs monitor Current, Voltage, Frequency, Power Factor, kW and kWh, and offer metering accuracy as high as 0.5% for accurate consumption data and billing with ability to verify accuracy with pulse output.

Over-The-Air Upgrade

Update easily with "over-the-air" firmware upgrades.



Fault Tolerance

Each CIMCON iSLC is a highly intelligent stand-alone device that utilizes the latest developments in self-organizing, self-healing, wireless technologies. Proper operation and execution of a light's schedule is not dependent on network communications.

Remote Control and Scheduling

CIMCON's iSLCs 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

Support dimming through 0-10 VDC or DALI Interfaces. It also has the optional feature to automatically detect 0-10V and DALI dimming type based on the driver connected to the same dimming output.

Fault Monitoring

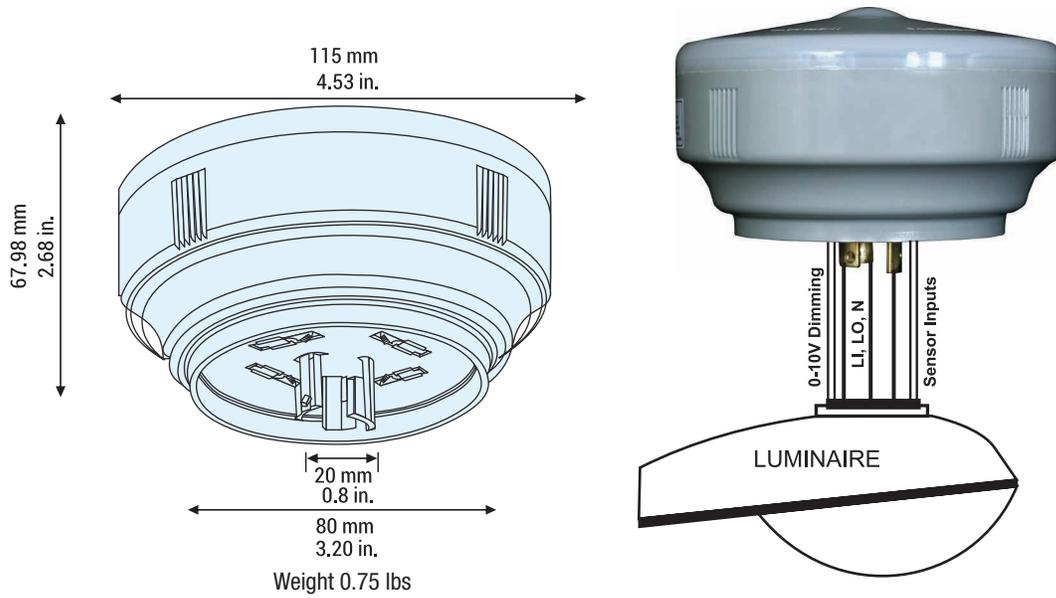
CIMCON's iSLCs provide extensive fault monitoring to report on day burners, burnouts, lamp cycling, ballast failures, over/under voltage, abnormal power consumption, low power factors, communication failures and more. All faults are sent to the Central Management System for alarm routing, visualization and fault correction. Alerts can be sent directly to relevant users immediately when they occur.

Technical Specifications

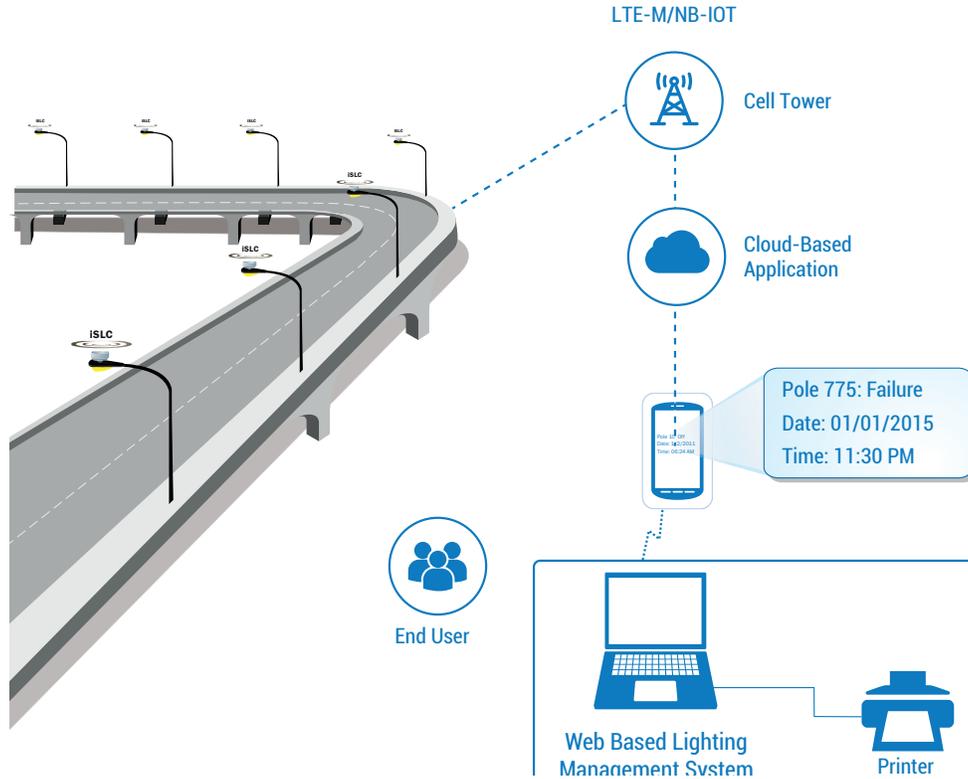
| | |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Controller | 16-bit microcontroller |
| Power Metering | Parameters measured: Voltage, Current, Power Factor, Frequency, kW and kWh |
| Rated Load | 1560VA 960W |
| Power | AC input 100 V-277 V (+/- 10%), 50/60 Hz |
| Radio Communication (Cellular LTE-M/NB-IOT) | <p>LTE-M/NB-IOT Cellular Modem NAN Network:</p> <p>Transmit Power Up to 23 dBm</p> <p>Receive Sensitivity (LTE-M) -105 dBm</p> <p>Receive Sensitivity (NB-IOT) -113 dBm</p> <p>Supported Bands Bands 1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 28 and 39</p> <p>Downlink / Uplink Speeds (LTE-M) Up to 375 kb/s</p> <p>Downlink/Uplink Speeds (NB-IOT) Up to 27.2 kb/s Downlink, 62.5kb/s Uplink</p> <p>Duplex Mode Half-Duplex</p> |
| GPS Module Specification | <p>Receiver Type: 22 Tracking/66 Acquisition Channel GPS Receiver GPS L1, C/A Code</p> <p>Max. Update rate: 10 Hz</p> <p>Sensitivity: Tracking: -165 dBm</p> <p>Reacquisition: -160 dBm</p> <p>Cold starts: -147 dBm</p> <p>Time-To-First-Fix: Cold starts: 31 seconds (typical)</p> <p>Warm starts: 30 seconds</p> <p>Hot starts: <1 second</p> <p>EPO Assist: 13 seconds (CTTFF)</p> <p>Accuracy: Automatic Position: 2.5 m CEP</p> <p>Speed: 0.1 m/s</p> |
| Dimming Interface | <p>(AO) Control Voltage: 0-10 V Maximum Current: 10 mA with Short Circuit protection</p> <p>or</p> <p>DALI</p> <p>or</p> <p>Auto AO/DALI Detection*: Feature to detect AO/DALI driver automatically with the same dimming output wires.</p> <p>* Contact CIMCON for details.</p> |
| 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 | 700 Joule CATC (20kV/10kA) |
| Operating Conditions | -40°C to + 70°C / -40°F to +158°F, 20% to 90% Rh non-condensing, IP66 |
| RoHS | Yes |
| Central Management System | Web-based software allows remote configuration, monitoring, control, and reporting |

iSLC-3100-7P-N

Mechanical Specifications

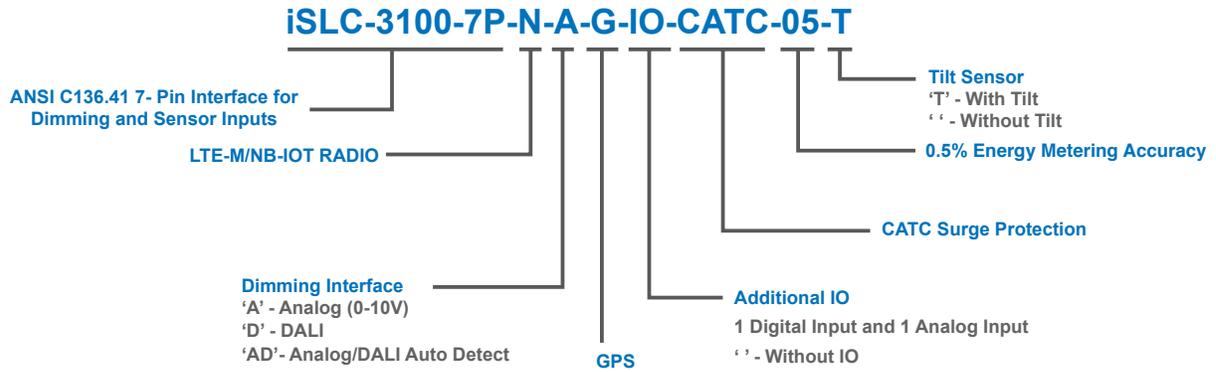


How it Works



iSLC-3100-7P-N

Ordering Code



Specifications subject to change without notice.
iSLC-3100-7P-N_R6
©2020 CIMCON Lighting, Inc.