

# Apollo ANLC - 480

Cellular light control unit full DALI support 120-480v

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### Cellular network lighting controllers

The Apollo cellular NLC connects to any street or area light via a 3/5/7 pin NEMA ANSI C 136 connector.

It supports a very wide voltage range from 120-480V

It controls the light output, sets off alarms in case of exceptions, measures the power consumption and is connected to a central management system **AM-CMS** or **AM-CMS-Hosted** via various cellular modes.

Light control modes are DALI D4i, Dali 2, Dali 1, 0-10V, PWM, and a 16A relay.

All LTE and GSM modes are supported. The NLC can be set up via WiFi and cellular connection. A GPS receiver provides the current location. Band 103 is supported. Apollo can provide access to this band in wide areas of the US



110 x 85 mm | NEMA ANSI C146.41 socket

### **Functional Specifications**

ON/OFF and dimming with automatic detection and configuration for:

- DALI, DALI 2, DALI D4i, including all memory banks
- ► PWM
- ► 0-10V
- 16A relay
- Meter grade power measurement with 0.01% precision
- Analog and digital input for external sensors via NEMA socket
- Auto commissioning with GPS and WiFi
- NEMA ANSI C146.41 socket
- Dual backup: auto mode and sensor override to avoid day burners
- Over the air software upgrade
- All power and configuration as well as error log saved in permanent memory
- NLC can act as Gateway with cellular backhaul and local WiFi repeater
- Optional aux. output via NEMA pins
- MTBF > 1,000,000 hours
- Embedded light sensor (oriented to neutral pin, lux reading over network and local node control in events of network outage)
- IR Output for Power / Energy Meter (for test and calibration)
- Max Voltage rating of (10kV) Surge protection
- DALI D4i Alarms (including light source outage via load monitoring, over temperature conditions, operating and lifetime hour timers)

## **Apollo ANLC - 480 Smart Lighting System**

#### **Technical Characteristics**

- Remote continuous and gradual dimming from 0-100%
- Ballast Communication Protocols: DALI 1, 2, D4i, PWM, 0-10 volts, relay
- Input Voltage: 120 480v AC @50-60 Hz
- Load Current: 16A
- Surge Protection: 700J, 20kA
- Operating Temperature: -40°c 85°c
- Safety: IEC60950-1:2005
- Isolation: 3kVac/5mA/5Sec
- Compliance with FCC PART 15, PART 90, 3GPP

#### **DALI 4 Memory Banks**

- \* TNI
- \* LIN
- \* Luminare Date Code Year
- \* Luminare Date Code Week
- \* Nominal Input Power
- \* Power at minimum dim level
- \* Nominal Minimum AC mains voltage
- Nominal Maximum AC mains voltage
- \* Nominal light output
- \* CRI
- \* CCT
- \* Light Distribution Type
- \* Luminaire color
- \* Luminaire identification

#### **Cellular Data**

#### **BANDS:**

**Cat M1:** B1/ 2/ 3/ 4/ 5/ 8/ 12/ 13/18/ 19/ 20/ 25/ 26/ 27/28/ 31/66/ 85

Cat NB2: B1/ 2/ 3/ 4/ 5/ 8/ 12/ 13/18/ 19/ 20/ 25/26/ 28/31/ 66/71/ 85 /103

**GSM:** EGPRS 850/900/1800/1900 MHz

Output power: 23 dBm

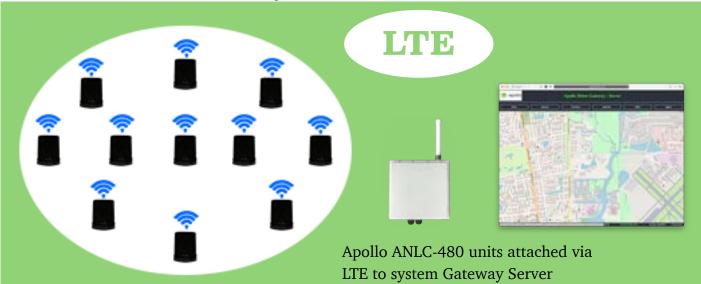
**Modes:** LTE, LTE-M, LTE NB IoT, LTE NB2 IoT, GSM all modes.

**GPS:** GPS/GLONASS/BDS/Galileo/QZSS/ GNSS

**WiFi:** 2.4 GHz, 20 dBm; All antennas internal, SMA connector optional on top of enclosure

#### Installation

The ANLC - 480 is easily installed on top of the lighting fixture utilizing a NEMA socket.



#### **System Architecture**