

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
- * Luminaire Date Code Year
- * Luminaire 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

