



nCM-ADC



AUTOMATIC DIMMING CONTROL PHOTOCELL CEILING MOUNT • LOW VOLTAGE

SPECIFICATIONS

FEATURES

- Automatically Dims 0-10 VDC ballasts
- Communicates w/ nLight Network
- Remotely Configurable/Upgradeable
- Self-calibrating Set-Point
- Push-Button Programmable
- 100 Hr Lamp Burn-in Timer
- Green LED Indicator

PHYSICAL SPECS

SIZE Circular 4.55" Dia. (11.56 cm)
1.55" Deep (3.94 cm)

WEIGHT 6 oz

MOUNTING

- Ceiling Tile Surface
- Round Fixture Box
- Single Gang Handy Box

COLOR White

NETWORK CONNECTION

2 RJ-45 Ports

ELECTRICAL SPECS

POWER CONSUMPTION < 2 mA

DIMMING LOAD

- Sinks < 20mA;
- ~40 Ballasts @ .5mA each

WIRES 20 AWG (2)

ENVIRONMENTAL SPECS

OPERATING TEMP

14° to 160° F (-10° to 71° C)

STORAGE TEMP

-14° to 160° F (-26° to 71° C)

RELATIVE HUMIDITY

20 to 90% non-condensing

OTHER

- UL and CUL Listed
- Title 24 Compliant
- 5 Year Warranty
- Made in the U.S.A.

The nLight nCM-ADC Series photocell sensor provides automatic dimming control for daylight harvesting applications. Ideal for spaces with windows, such as vestibules, corridors, classrooms, or offices, the sensor works by first monitoring daylight conditions in a room. It then controls the lighting so as to ensure that adequate lighting levels are maintained. The nCM-ADC is capable of directly outputting to any 0-10 VDC dimmable ballast, or can control outputs on one or more dimming slave packs (nSP-5-D), dimming WallPods (nPOD-D), or auxiliary dimming output devices (nIO).

The nCM-ADC sensor can be used alone or together with occupancy sensors. Manual override or adjustment of the dimming level is possible via WallPod dimmers or through the SensorView software.

SENSOR OPERATION

The sensor controls a 0-10 VDC dimmable ballast to achieve maximum daylight harvesting while maintaining a minimum light level referred to as the set-point. When no daylight is available, the sensor allows the dimmable ballast to operate at its full bright level (10 VDC). As daylight increases and begins to contribute to the overall light level of the room, the Automatic Dimming Control (ADC) feature starts dimming the ballast proportionally.

The lights will remain off until the daylight level drops below the set-point. At this point, the lights will be turned on with the ballast set at its full dim level. As the daylight levels fall further, the ADC feature will again take control of the ballast; reducing the dim level (increasing the brightness) in order to achieve the necessary light level. At the point when all daylight contribution is gone, the ballast will be back at its full bright level.

NLIGHT OPERATION

This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When daisy-chain wired, using CAT-5 cabling, with other nLight-enabled devices such as sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software.

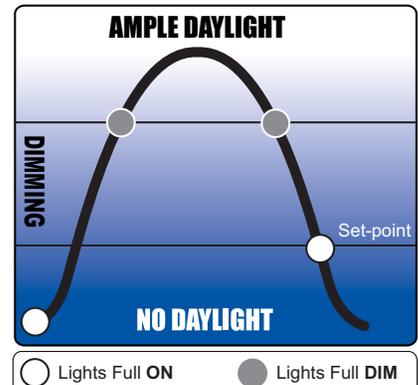
OPTIONS

DUAL ZONE (-DZ)

- Ideal for classrooms w/ individually controlled parallel rows of light
- Provides a second dimming output for controlling a second 0-10 VDC dimmable ballast
- Second zone's 0-10 VDC dimmable ballast is controlled to a selected level (voltage) higher than primary zone

LOW TEMP/HIGH HUMIDITY (-LT)

- Sensor is corrosion resistant to moisture
- Operates down to -40° F/C



AUTO DIMMING CONTROL

ORDERING INFO

nCM-ADC-[DUAL ZONE]-[TEMP/HUMIDITY]

OPTIONS

DUAL ZONE

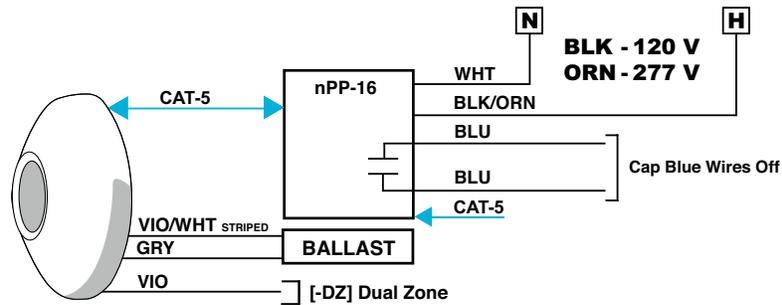
- Blank = None
- DZ = Dual Zone

TEMP/HUMIDITY

- Blank = Standard
- LT = Low Temp

WIRING (DO NOT WIRE HOT)

Sensor power is provided via the CAT-5 connection. CAT-5 cables can be wired using either T568A or T568B pin/pair assignments.



DEVICE SETTINGS

Several operational settings for the nCM-ADC are available and configurable through the SensorView software:

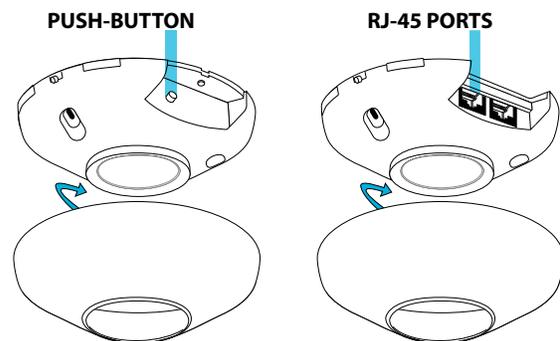
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|--|--|
| Override (Full Dim/Full Bright/Normal) | Automatic Set-point Calibration Mode |
| Occupancy Tracking (Enable/Disable) | Blink-back Set-point (in footcandles) |
| Photocell Tracking (Enable/Disable) | 10's Digit of Set-point (0-200 fc) |
| Switch Tracking (Enable/Disable) | One's Digit of Set-point (0-9 fc) |
| Occupancy Tracking Channel (1-16) | Dimming Range Upper Limit (0-10 VDC) |
| Photocell Tracking Channel (1-16) | Dimming Range Lower Limit (0-10 VDC) |
| Switch Tracking Channel (1-16) | Dual Zone Dimming Offset (.5-10 VDC) |
| Button Mode (Enable/Disable) | Sunlight Discount Factor (1-8) |
| Idle Time Until Dim | 100 hr Burn-in Timer Mode (Enable/Disable) |

INSTALLATION

- Connect Class 2 dimming output wires to ballast dimming inputs
- Mount sensor directly to a ceiling tile or a metallic grid (two self-tapping screws provided)
- Sensor's mounting holes also align with standard round fixture or single gang handy box (screws not provided)
- Interconnect unit (via RJ-45 ports) with other nLight devices in lighting zone using CAT-5 cables
- Once power is received via CAT-5 connection, all devices in zone will automatically begin functioning together according to each device's defaults

PROGRAMMING

Refer to included instruction card for default settings and directions on programming the sensor via the push-button.



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WARRANTY: Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, Inc., upon prompt notice of such defect, will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

LIMITATIONS AND EXCLUSIONS: This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.

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