



nCMB ADC

AUTOMATIC DIMMING CONTROL PHOTOCELL FIXTURE MOUNT • LOW VOLTAGE



SPECIFICATIONS

FEATURES

- Communicates w/ nLight Network
- Automatically Dims 0-10 VDC Ballasts
- Remotely Configurable/Upgradeable
- Works as Stand-alone Unit or with Occupancy Sensor
- Self-calibrating Set-Point
- Digital Set-Point Control
- Push-Button Programmable
- 100 Hr Lamp Burn-in Timer
- Green LED Indicator

PHYSICAL SPECS

- SIZE 3 5/8" x 3 5/8" x 1 1/2" Deep (9.2 cm x 9.2 cm x 3.8 cm Deep)
- WEIGHT 6 oz
- MOUNTING 1/2" knockout in fixture or junction box
- COLOR White
- NETWORK CONNECTION 2 RJ-45 Ports

ELECTRICAL SPECS

- POWER CONSUMPTION < 3 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
- SILICONE FREE
- ROHS COMPLIANT

OTHER

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

The nLight nCMB 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 nCMB ADC is capable of directly outputting to any 0-10 VDC dimmable ballast, or can control outputs on one or more dimming secondary packs (nSP5 D), dimming WallPods (nPOD D), or auxiliary dimming output devices (nIO). The nCMB 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

As daylight increases and begins to contribute to the overall light level of a room, the nCMB ADC starts dimming the 0-10 VDC dimmable ballast proportionally. At the point when sufficient daylight is present to maintain the set-point without any contribution from the lights, the sensor will hold the ballast at its full dim setting (0 VDC). When daylight levels fall below the set-point again, the nCMB ADC will start reducing the dim level (increasing the brightness) in order to increase the overall light level. Finally, at the point when all daylight contribution is gone, the ballast will again be at its full bright level (10 VDC). The sensor's set-point can be easily adjusted after it has been initially programmed (via either the Automatic or Manual process) using the Incremental control feature that steps the brightness setting (voltage) up or down 10% (1 VDC) and adjusts the set-point accordingly.

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.

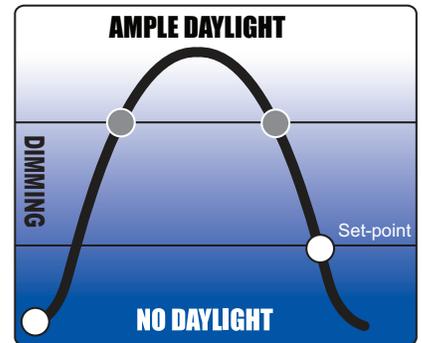
OPTIONS

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

nCMB ADC [DUAL ZONE] [TEMP/HUMIDITY]

OPTIONS

DUAL ZONE

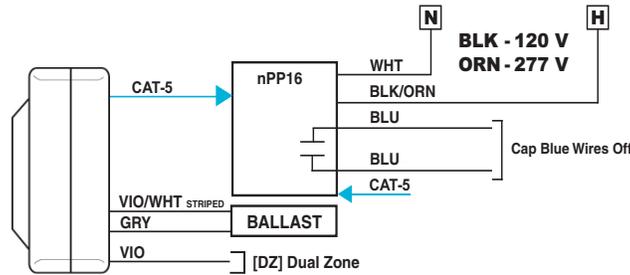
- Blank = None
- DZ = Dual Zone

TEMP/HUMIDITY

- Blank = Standard
- LT = Low Temp

WIRING (DO NOT WIRE HOT)

Note: Sensor power is provided via the CAT-5 connection. T568B pin/pair assignment is recommended for all CAT-5 cables.



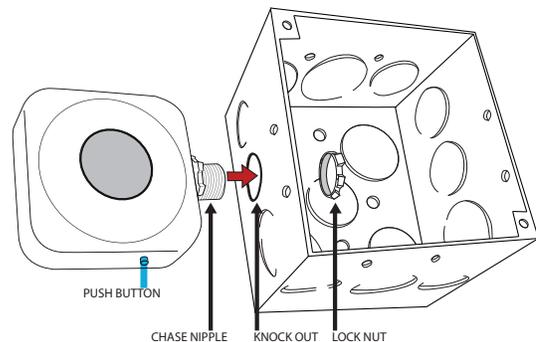
DEVICE SETTINGS

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

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

- Mount sensor through a 1/2" knockout to a fixture or junction box.
- Connect Class 2 wires to 0-10 VDC ballasts
- Interconnect unit (via RJ-45 ports on rear of unit) 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.



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.