nCM 9

STANDARD RANGE 360º SENSOR
CEILING MOUNT • LOW VOLTAGE • PASSIVE INFRARED (PIR)



SPECIFICATIONS

FEATURES
PIR Occupancy Detection
360º Coverage
Communicates w/ nLight Network
Remotely Configurable/Upgradeable
Push-Button Programmable
Adjustable Time Delay
100 Hr Lamp Burn-in Timer
Green LED Indicator

PHYSICAL SPECS
SIZE 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
nLIGHT NETWORK PORTS 2 RJ-45

ELECTRICAL SPECS
POWER CONSUMPTION < 3 mA
DIMMING LOAD
Sinks < 20 mA;
~40 Ballasts @ .5 mA each
WIRES None

ENVIRONMENTAL SPECS
OPERATING TEMP
14º to 160º F (-10º to 71º C)
RELATIVE HUMIDITY
20 to 90% non-condensing
SILICONE FREE
ROHS COMPLIANT

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

OVERVIEW
The **nCM 9** Series nLight Standard Range 360° occupancy sensor offers amazing performance and sensitivity to small motions (e.g. hand movements). Ideal for small rooms with drop ceilings and areas without obstructions, the **nCM 9** is a snap to install. Its light weight allows surface mounting to drop ceilings or a ceiling grid. The **nCM 9** sensor can cover entire private offices or smaller rooms by itself; however it is also the ideal lead sensor for odd shaped rooms. For example an **nCM 9** in a restroom vestibule can be paired with an **nCM PDT 9** Dual Technology sensor in a main stall area. Another application is an **nCM 9** controlling an entrance hall to a classroom and communicating with an **nWV PDT** controlling the main room. In both cases the lights would be activated on by the **nCM 9**.

SENSOR OPERATION
The sensor indicates occupancy when changes in the infrared energy within its field-of-view are detected. A relay located elsewhere within the sensor’s zone is then signaled to switch the line voltage lighting load on. An internal time delay, factory set at 10 minutes, keeps the sensor in the occupancy state during brief periods of inactivity. The timer is adjustable, and is reset every time occupancy is re-detected. This state-of-the-art sensor requires no field calibration or adjustment.

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 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

DIMMING CONTROL (D)
- Provides dimming outputs to control 0-10 VDC dimmable ballasts
- Follows dimming commands from nLight Wallpod dimmer or SensorView software
- Adds 20 AWG violet & gray wires

ON/OFF PHOTOCELL (P)
- On/OffOperation: Full control during periods of occupancy with adequate daylight
- Inhibit Operation: Prevents lights from turning on if adequate daylight is available

AUTOMATIC DIMMING CONTROL PHOTOCELL (ADC)
- Photocell within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts
- Provides a second time-out period that enable the lights to go to a dim setting before turning off
- Follows dimming commands from nLight WallPod dimmer or SensorView software
- Adds 20 AWG violet & gray wires

LOW TEMP/HIGH HUMIDITY (LT)
- Sensor electronics are coated for corrosion resistance
- Operates down to -40º F/C
- Required for bathroom & cooler/freezer applications

ORDERING INFO

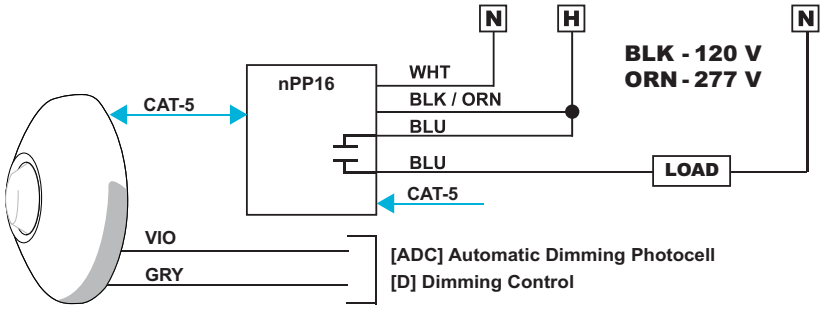
nCM 9 [DIMMING] [DAYLIGHTING] [TEMP/HUMIDITY]

OPTIONS	DIMMING*	DAYLIGHTING	TEMP/HUMIDITY
	Blank = None D = Dimming	Blank = None P = On/Off Photocell ADC = Auto Dimming Control Photocell	Blank = Standard LT = Low Temp

*D functionality also in ADC option

WIRING

T568B pin/pair assignment is recommended for all CAT-5e cables.

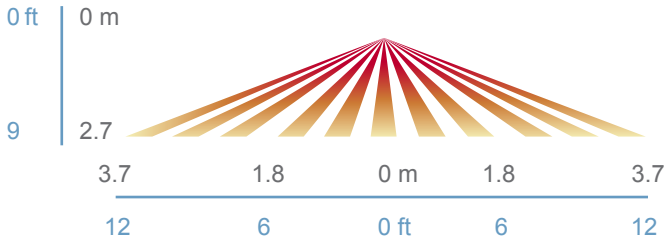


COVERAGE PATTERN

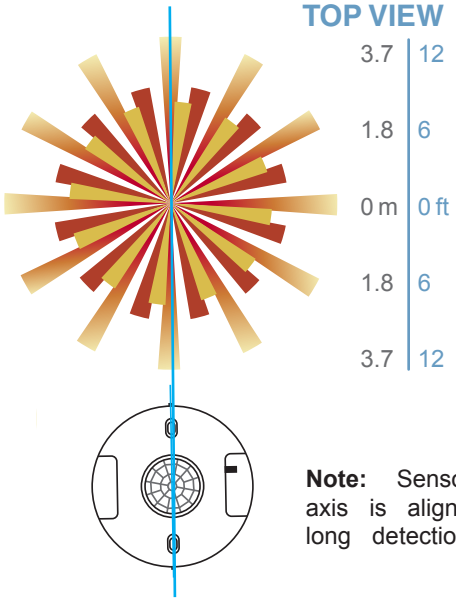
9 STANDARD RANGE 360° LENS

- Best choice for small motion (e.g. hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage

SIDE VIEW



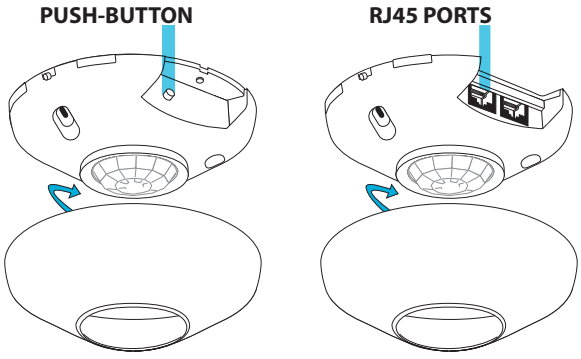
TOP VIEW



Note: Sensor's screw axis is aligned with a long detection segment

INSTALLATION

- 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-5e cables
- Once power is received via CAT-5e connection, all devices in zone will automatically begin functioning together according to each device's defaults
- Sensor will detect motions crossing segments more effectively than motions parallel to beams
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space



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.

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