# NV75M/X/R/W Indoor Series

16M Dual Mironel Optics Pet Immune Anti-Mask Detectors

#### **Description**

Paradox NV75M /X /R /W Series indoor industry-leading detectors provide superior detection with rock solid stability capabilities thanks to the revolutionary dual Mironel Mirror / Fresnel PIR optics combined with Paradox True Pet Immunity, and best-in-the-industry active Anti-Mask technology (EN50131 Grade 3). The NV75MR wireless version provides three years of battery life with active Anti-Mask detection. Top of the line, NV75MW adds microwave frequency shift detection SeeTrue technology for the highest security applications.

The revolutionary Mironel mirror, combined with unique W shaped Fresnel optics, provides superior 16m / 52 ft (EN Grade 3) coverage as well as Paradox True Pet Immunity or Creep Zone detection, packed in a compact, rigid uniquely styled design.

#### Mironel Optics (patent pending)

Designed by the Paradox R&D team, Mironel Mirror/Fresnel optics combine a unique W shaped Fresnel lens with multi-reflecting mirror technology. The Mironel design has achieved amazing results in energy collection, focal accuracy, beam coverage and range – at half the physical size of conventional Fresnel or mirror only optics. Another benefit is its 5X stronger and firmer outside construction due to its W shape Fresnel lens, making it a perfect solution for sports facilities, schools, prisons and such.

Mironel technology provides a remarkably stable detection at an impressive range of 16m / 52 ft (EN Grade 3) – unmatched coverage for this size. The NV75M Series includes Dual Mironel optics providing better Pet Immunity or Down Creep Zone when Pet Immunity is not needed with easy mechanical selection.



#### MIRONEL OPTICS

Mironel technology is a step ahead in detection combining mirror reflection technology with Paradox's W shape groves in / out Fresnel lens – a masterpiece optic solution package.

> W SHAPE FRESNEL LENS

#### **Models Selection**

**NV75M: Dual** PIR, Dual Mironel optics, **Pet** Immunity or Creep Zone detection (mechanically selected), Paradox active and fast **Anti-Mask** detection (exceed EN50131) with **pre-alarm indication**, equalized **temperature compensation** with auto pulse + processing, Alarm, Mask and tamper solid state relays.

NV75MX: Same as the NV75M with EVO Bus 4 wire connection.

**NV75MR:** Wireless version of the NV75M, two-way future upgrade ready, with selectable built-in frequency of 433 or 868 MHz (other available upon request), battery life expectancy of three years based on normal use, including active Anti-Mask detection.

**NV75MW:** Same as the NV75MX with added **Dual Microwave** 10 GHz antenna, **SeeTrue** Technology with soft/strict selection.

#### SeeTrue Technology (Anti-Cloaking)

Paradox's proven SeeTrue Technology sets the bar for professional high-security detection. It relies on frequency shift microwave detection that calculates speed and direction to determine real movement, providing reliable microwave detection.

Overcoming PIR weakness of heat stamp changes that can be blocked by heat insulating materials and microwave weakness of through wall detection, SeeTrue defines microwave detection only in Strict mode. In Soft mode, microwave calculations will also be looking for significantly reduced heat stamp PIR detection changes to confirm detection. SeeTrue advanced Strict mode calculation makes it impossible to cross the protected area (up to 12m) without being detected even if a moving human body is insulated by thick cloth, umbrella, carton, wood box, etc. SeeTrue functions exceptionally well in -35 °C to +50 °C without noticeable performance reduction, overcoming the common PIR only performance variations versus ambient temperature.

Paradox SeeTrue is the ultimate solution where true high-security protection is needed with uncompromised detection and when highest reliability is a must. It is perfect for museums, government sites, high-security military facilities, prisons, and such.



#### **Features**

- 16 meter Dual Mironel detectors
- Active Anti-Mask IR detection (Clean Lens notice NV75MX)
- 12 meter SeeTrue range (NV75MW)
- EVO bus connection (NV75MX/NV75MW)
- Wireless internal frequency selection (NV75MR)
- Mechanical activation Creep Zone
- Dual/Single Edge operation
- Dual Tamper (cover and wall)
- Wall or corner-mount
- Optional bracket

#### **Detector Beam Patterns**



#### SIDE VIEW:



X

0

D

R

Р

### Active IR Anti-Mask

Paradox Anti-Mask technology combines patent-pending in / out grooves W lens and the latest 32-bit firmware algorithm, it exceeds, Grade 3 EN50131-2-2 requirements for blocking material detection and detection speed. The NV75M Anti-Mask series recognizes objects placed within 30 cm / 12 in. of the lens. Detection includes hard-to-detect clear lacquer, black paper, aluminum foil and clear adhesive tape, as well as movement within close range of the NV75M. It also will indicate masking of dirt or dust build-up on the lens so it can be cleaned. Mask pre-alarm indication has been added for NV75M line of products.

## **Technical Specifications**

IR Movement Detection	Two detectors, two dual element sensors, Two Mironel Optics
Optics	Two Mironel Mirror/W Fresnel optics with mechanical pet/Creep Zone selection
Coverage	16 meters/52 feet; 90° - complies with EN50131-2-2 Grade 3
Anti-Masking	Active IR with Dual detectors, blocking items up to 30 cm and lens applied materials including clear lacquer. Meets and exceeds EN50131-2-2 Grade 3 (NV75MR meets and exceeds EN50131-2-2).
Pet Immunity	Pets up to 50 cm will not be detected
Single/Dual Edge	Infrared detection requires entry or exit in Single-Edge mode; in Dual-Edge, entry and exit is required from both detectors
Creep Zone	Mechanically selectable Creep Zone detection 1.5m/4 ft (cancels Pet Immunity when active)
Current - Wired Models	NV75M/NV75MX 23 mA
NV75MR Wireless Power	2 x AA Alkaline, up to 3 years for normal use with <b>Active</b> Anti-Mask detection
NV75MR Frequency	433 or 868 MHz, internally selectable
NV75MW Microwave	10 GHz, Dual frequency shifting
SeeTrue NV75MW	Strict mode: detects human body movement within 12 meter range despite temperature or insulating materials masking. Soft mode will detect human body movement with 60% insulation masking
Operating Temperature	-35° to 50° C (-31° to 122° F)
Relative Humidity	95% non-condensing
Tamper	Dual-Cover and wall
Dimensions	12.8 x 6.2 x 5.4 cm (5.1 x 2.4 x 2.1 in.)
Weight	120g / 0.3 lb
Certification	EN 50131-2-2 Grade 3 Class II
	(NV75M / X / W)

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