



Architect & Engineer Specifications

The contractor shall install volumetric outdoor detectors according to the following.

Catch Performance & Immunity to False alarms

The outdoor detectors shall include both PIR and microwave technologies. Detection coverage shall be 15m (50') 90°. Long Range Lenses for 23m (75') 5° and barrier 15 (50') 5° shall be provided as standard in the package.

The outdoor detectors shall employ **2 PIR channels** with Digital Correlation Technology, and **2 Microwave channels** with Sway Recognition Technology for reliable catch performance and immunity to false alarms from all the following causes:

- Rapid background temperature changes due to wind gusts or changing cloud/sun patterns combined with the differing speeds at which various materials heat up and cool down.
- Rain, hail and snow
- Reflections
- Moving and swaying objects such as bushes, tree leaves & objects with repetitive movement.
- Blowing debris
- Pets and animals up to 70cm (2'4") head height

Standards and Approvals

The detector shall be UL or ETL listed.

The detector shall be approved by FCC Rules, Part 15.

The product shall meet all of the requirements as laid down for its type by the European R&TTE Directive.

The detector shall carry a CE mark.

Installation Flexibility

The detectors installation height shall be variable from 1 to 2.7m (3'3" to 8'10"). Dedicated professional swivel brackets, with anti-vandal hidden wiring and wall tamper shall be available for the detector as follows:

- Standard swivel - provided as standard with the detectors.
- Pole mount bracket – for installation on poles (optional).
- Barrier swivel – for 90° installation to the mounting surface (optional).
- Conduit bracket – for installations in which wiring is in a pipe external to the wall or pole (optional).
- Swivel Conduit – for use with the Standard Swivel Bracket, when wiring is in a pipe external to the wall (optional).

Microwave Anti-Collision Feature

The Outdoor Detector shall have a microwave Anti-Collision feature that enables dual technology microwave detectors to be installed back-to back or face-to-face without microwave interference.

Anti-Masking

The Detector shall employ 4 active IR channels for continuous monitoring of masking attempts on the detector lens. The AM signal shall be provided via a separate relay output that also indicates any fault in the detector.

Proximity Anti-Sabotage

The detector shall employ 2 microwave channels with directional and proximity analysis, for alerting when the detector is approached in close proximity. This feature may be enabled or disabled according to the installation requirements.

“Dirty Lens” Alert

The detector shall have a “Dirty Lens” alert feature that will alert via a separate output when the detector’s lens requires cleaning. The lens transparency will be continuously checked with the same active IR channels as used for Anti-Masking, but with a separate decision method. The “Dirty lens” alert will be provided via a separate 70mA open collector output on the terminal block.

Environmental Rating

The detector’s environmental rating shall be IP65 for protection of horizontal water jets.

Protective Hood

The detector shall have an integral protective hood for protection from sun rays, rain, hail, snow, dust and bird droppings.

Walk Test LEDs

The detector shall have 3 high visibility LEDs enabling walk test of the detector in outdoor lighting.

Remote Control and Diagnostics when installed on the ProSYS bus

The detectors shall have Remote Control Diagnostic capabilities when installed on the 4 wire ProSYS Integrated Security System bus. This will provide:

- **Faster and more cost effective installation:** Wiring in Relay mode requires that each detector's wiring goes directly to the panel (star configuration only). With bus wiring the detectors may be chained between themselves, saving a huge amount of cabling time and shortening the installation.
- **Simpler installation with less wires:** In bus mode, 4 wires are required for all installations. In Relay mode, up to 10 wires may be required for implementing the full functionality of the detector: 4 wires are required for basic installation of alarm and tamper, 2 additional wires are required for AM output. Additional wiring connections are required for using the functions of LED enable, Set/Unset control, remote test control, and for "dirty-lens" alert.
- **Remote Diagnostics:** The remote diagnostic capabilities save on site visits required by installers, and in case on-site maintenance is required, the installer can know beforehand the exact nature of the problem thus saving time and effort on-site. The Remote diagnostic capabilities are:
 - o Measurement of the voltage input to the detector.
 - o Measurement of the Signal and Noise levels from the detector's 4 channels:
 - o Software Version

Remote Control: All the settings of the detector shall be adjustable from the ProSYS keypads or via the upload/download software, saving installation and adjustment time. Also, the detection sensitivity settings may be changes to eliminate false alarm problem, until an installer can visit the site. Remote control settings shall include:

- LED control: 3 LEDs / 1 LED / Off
- Detection sensitivity: (Low, Mid, Normal, High). High disables Sway recognition
- MW range: Min, 20%, 40%, 60%, 80%, maximum (Max is 23m), Trimmer (MW range is defined by the trimmer on the PCB)
- Alarm logic: AND / OR (with OR logic a detection in either the MW OR the PIR channels trigger an alarm)
- Lens type: Wide-angle /Long-range (for synchronizing the detector's processor setting to the lens installed)
- Anti-mask: On / Off
- Follow arm: On / Off

Video Camera Option

The outdoor detector shall have an option for inclusion of a video camera in the same housing. The video camera shall include an optical lens and not be of a pinhole lens type.



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