PIR1680
SERIES

The most advanced **microprocessor** PIR with **smart** false alarm rejection, **animal immunity** & **built-in temperature sensors**

Advanced PIR1680 Series Passive Infrared Motion Detectors exemplify NAPCO sensor technology's innovation, increasing dependability without compromising intruder "catch" sensitivity. For applications where animal/pet immunity is key, the PIR1680PT supports 65lb. (29kg) pet protection within its 45' (13.7m) range. Or, the original model PIR1680, has a 50' (15.2m) range and offers nominal 20lb. (9kg) animal/rodent immunity. Outstanding false alarm rejection in both models is made possible with their advanced microprocessor that has been embedded with a library of valid and false alarm signal signatures—enabling the PIR to differentiate intruders from animals and other traditional false alarm sources. In addition to proven intruder-detection circuitry, these units also feature a built-in temperature sensor – at no additional charge—so you can provide traditional security, as well as climate security from heat and/or freeze damages, when HVAC systems fail, before pipes burst or décor, pets or perishables are ravaged by heat extremes, otherwise left unchecked.

standard
wide angle
coverage

infrared PIR

look down/creep zone

pet/animal immunity

room-temp alert

Two decades of NAPCO sensor engineering expertise combines to provide its sensors with unsurpassed false alarm prevention and intruder catch detection.

FEATURES

- **Broad range and wide angle coverage suitable for most residential & commercial installations:** PIR1680PT 45 x 45' (13.7 x 13.7m) ; PIR1680 50 x 50'(15.2m x 15.2m)

- **Look-down/creep zone** provide detection zones directly beneath the sensor for inescapable intruder "catch"

- **Pet/animal immunity up to 65lbs.** with the PIR1680PT model or 20lbs with standard PIR1680 model.

- **Insect-safeguarded enclosure** The units' sealed sensor chamber prevents insects, draft and dust interference to reliable detector performance.

- **Built-in high-temp. alert & low-temp. alert sensors help provide value-added premise protection, with an early warning system sensing temperature extremes.** The units' selectable, temperature alert sensors can be used to report temperature extremes before costly damages occur when HVAC systems fail or the like. Low-temp alert 40^{0}F (4^{0}C), can be used to help prevent pipes from bursting or freezing. High-temp alert 90^0 F(32^{0}C) can prevent important an important freezer from defrosting/thawing or perishables being damged by extreme heat.

- **Unsurpassed PIR False Alarm Rejection.** The units' microprocessor-based Detect & Compare Signal Imaging Analysis utilizes a profiling system to differentiate the signal signature of valid alarms from those of false alarm sources, like heaters, fans, blowing drapes/blinds and animals, for unsurpassed intruder detection and unsurpassed PIR false alarm protection. The product of decades of sensor engineering and expertise, virtually rivaling the performance of a dual technology device, the PIR1680 Series' reliability and accuracy will save both time and money.

- **Active Self-Test Mode** your assurance that each PIR1680PT is operational within the system, performing electrically, as well as functionally, to specification. If the unit fails its own initiated self test, it will send a trouble-report to the alarm control ensuring consumers don't suffer a false sense of security.

- **Optimized field-of-view with custom-engineered aspheric optics** Napco's fresnel lenses are carefully designed to provide the ideal wide angle lens array and are easily-aimable during installation. Additional field-changeable lenses available: Pet Alley, Barrier and Long Range.

- **Superior RFI-/EFI-/lightning-shielded protection** Key components and resilient SMD circuitry are electronically-shielded to 20V/m. This protects the unit's proper performance from nuisance interference due to static discharge, power surges, electric spikes, etc.

- **Critical Range Control** The PIR1680/PT enables customizable range with a calibrated adjustable potentiometer to fine-tune range during walk-test, if desired.

- **Automatic Temperature Compensation** the unit's circuitry automatically adjusts for seasonal and climate variances, providing accurate detection despite extremes of heat or cold*.

- **Fast, flexible mounting** The detector is conveniently installed on walls or in a corner and may be more precisely aimed horizontally or vertically, by repositioning the PCB within the enclosure for a full range of coverage. Large wiring channel, generous terminal strip and captive PCB screw combine for fast, trouble-free, neat installations every time.

- **Tamper/Vandalism Supervision** defeats acts to sabotage or vandalize the unit by reporting them to the system if opening the enclosure is attempted.

- **Added False Alarm Prevention Features** The unit employs myriad features to ensure only valid alarms are reported in the system. This includes properties of its circuitry and fresnel optics, which include integral extra white light protection, a Napco-pioneered innovation.

- **5 year warranty** Napco stands behind all of its sensors with an unsurpassed 5 year warranty, for your added peace-of-mind.

standard wide angle coverage

room-temp alert

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infrared PIR

SPECIFICATIONS

Microprocessor:	2K ROM with A-D Converter
Operating temperature*:	-10 to +50 degrees C (14° to 122° F)
Freeze damage alert:	40°F (4°C)
Heat damage alert:	90°F (32°C)
Mounting:	Wall or corner, 12' (3.6m) max.; For pet/animal applications 7' (2.1m) is recommended.
Output relay:	Form A; normally closed
Relay time:	Approx. 3 seconds
Alarm Relay:	100mA, 24Vdc with internal 10 ohm current limiting resistor
Multi-mode Trouble Output (Open collector)	
Self-Test Interval:	11 - 16 hrs.
Power supply requirements:	Filtered 10.6 to 16VDC nominal with battery backup form the control panel.
Current drain:	28mA (idle/alarm) at 12VDC (nominal)
Dimensions:	3.3"H x 2.5"W x 1.9"D (8.4 x 6.4 x 4.8 cm) (HxWxD)
Shipping weight:	5 oz (142 gm)

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