OPAL Plus

OUTDOOR PIR + MW DUAL TECHNOLOGY MOTION DETECTOR

The OPAL Plus is an outdoor dual technology motion detector, which is perfectly suited for application both on the outside of the protected building as well as indoors, where difficult or specific environmental conditions prevail (in halls, under umbrella roofs, etc.). The OPAL Plus detector incorporates PIR and MW technologies, as well as antimasking function based on the microwave technology. The dual technology combined with the algorithm of detector auto–tuning to the environmental conditions ensures high immunity to false alarms and, consequently, stable operation in harsh weather conditions, such as rain, snow, sunshine and strong gusts of air. The device offers correct operation in a wide temperature range from –40°C to +55°C, the ambient temperature changes being automatically compensated.

The OPAL Plus detector has a detection angle as wide as 100 degrees and a reach of more than 15 meters. Also, as the look down zone is protected, any intruder's attempt to approach the device to damage it or pull it off will be detected. In addition, the detector software has been designed so as to avoid false alarms caused by the movement of small pets. The OPAL Plus detector is also provided with a dusk sensor for OC output control, which allows it to be used in alarm systems with home automation, without having to install additional dusk detectors. The signal from the low–current output can be passed directly to the relay located in the electrical switchboard or to the home automation controller. The detector can also interface with the KNX system via a control panel of the INTEGRA series. Thus, the OPAL Plus functionality allows you to easily and conveniently control, for example, the roller shutters, building exterior lighting, garage door or entrance gate, as well as select the moment of operation through fine sensitivity adjustment. A big help for the installer is the function of remotely changing sensitivity of all detection circuits and dusk sensor with the OPT–1 keyfob, which eliminates the need for repeatedly opening the detector enclosure to change the settings.

Also the device enclosure is unique, as it is made using two–component injection molding technology. The result of it is a splash–proof IP54 rated design, which protects the OPAL Plus electronics against harmful atmospheric phenomena. The detector enclosure is also characterized by high mechanical strength and resistance to UV radiation. For additional protection of the device against atmospheric precipitation and fouling, you can install the **HOOD C** (white) or **HOOD C GY** (gray) protective cover on the detector enclosure.

The OPAL Plus detector is designed for mounting directly on a flat surface. If the detector is to be turned vertically or tilted horizontally, you can use special angle–type or ball–joint type brackets from the **BRACKET C** set (white) or **BRACKET C GY** set (gray).

The OPAL Plus detector is available in two color versions: white (**OPAL Plus**) and gray (**OPAL Plus GY**).

- dual technology: PIR and microwave
- anti–masking function based on the microwave technology
- built–in dusk sensor which allows the detector to be used in automation systems
- configuration of the sensitivity of detection paths and dusk sensor using the PCB buttons
- built–in receiver of the **OPT–1** IR keyfob signal
- remote configuration of the sensitivity of detection paths and dusk sensor with the **OPT–1** keyfob without having to open the detector enclosure
- splash–proof polycarbonate enclosure, IP54 rated
- tamper protection against opening and detachment
- digital temperature compensation for correct detector operation in –40°C to +55°C temperature range
- can be used in adverse weather conditions (rain, snow, fog, strong wind)
- high immunity to false alarms because of the use of auto–tuning algorithm
- look down creep zone control

The actual appearance of the products may differ from the presented images. Product descriptions are provided in the web service for information purposes only.

- small animal immunity option (up to 20 kg)
- low power consumption
- can be installed directly on a flat surface or with the use of dedicated brackets from BRACKET C set:
    - angle type bracket: constant 45° angle
    - ball–joint bracket: adjustable vertically through 60° and horizontally through 90°

TECHNICAL DATA

Supply voltage	12 V DC
Detected target velocity	0,3...3 m/s
Operating temperature range	-40...+55 °C
Recommended mounting height	2,4 m
Standby mode current consumption	15 mA
Max. current consumption	20 mA
Relay contacts rated load (resistive)	40 mA / 16 V DC
Maximum humidity	93±3%
Dimensions	65 x 138 x 58 mm
Environmental class according to EN50130-5	IIIa
Alarm signaling time	2 s
Complied with standards	EN50131-1, EN50130-4, EN50130-5
Microwave frequency	24 GHz
Warm-up period	40 s
IP code	IP54
Detector weight (without bracket)	176 g
Permissible load of D/N output (OC-type output)	50 mA / 12 VDC
Security grade	Grade 2

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