

# AGATE

AGATE is an outdoor curtain motion detector which belongs to the group of perimeter protection devices. It is ideally suited for use both on the outside of the protected building, and in the interiors where difficult or specific environmental conditions prevail (in halls, shelters, sheds etc.). The AGATE detector has two motion detection circuits – PIR and MW, and uses active IR anti-masking (for indoor use). Thus, it meets the high security requirements specified in **EN 50131** for **Grade 3**: the detector can be used to protect the interiors of medium to high risk premises, like banks, museums, jewelry stores, etc.

The dual technology, in conjunction with the algorithm of detector auto-tuning to the environmental conditions, provides high immunity to false alarms and hence stable operation in harsh weather conditions, such as rain, snow, sunshine and strong gusts of wind. The device offers correct performance in a wide range of temperatures from  $-40^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$ , the ambient temperature changes being automatically compensated.

The AGATE curtain detector is characterized by a narrow detection angle of only 10 degrees and a range of 14 m. At that distance, the detection area (curtain) has a width of approx. 1 m. Sensitivity of the detection circuits is controlled by two independent potentiometers located on the detector electronics board.

What is also unique is the device enclosure, which is made using the two-component injection molding technology. The thus received splash-proof, IP54 rated design protects the AGATE electronics against harmful atmospheric phenomena. For additional protection of the device against atmospheric precipitation and fouling, you can install the **HOOD A** protective cover on the detector enclosure. The detector enclosure has high mechanical strength and is resistant to UV radiation.

Design of the AGATE detector enables it to be mounted directly on a flat surface. The detector can also be mounted using a dedicated angle bracket (at fixed  $90^{\circ}$  inclination angle). When installing the detector inside the building, you can also use adjustable brackets such as **BRACKET A** or **BRACKET B**.

When it is required to move the detector away from the wall, at a distance of even by over a dozen centimeters, it is worth using the **BRACKET E** modular bracket. Especially if there is a gutter or lamp in the vicinity of the device, which can limit the full range of the device detection field. A special insert for **AGATE / AOCD-260** detectors allows their installation also using **BRACKET A** and **BRACKET B** brackets (recommended for indoor installation).

All listed brackets are adapted for wall and ceiling mounting. In addition, **BRACKET E** and **BRACKET B** have an enclosed design that makes it easier to hide the cable, thereby improving the overall aesthetics of the installation.

- two detection circuits: PIR and microwave
- active IR antimasking for indoor applications
- splash-proof polycarbonate enclosure, **IP54** rated
- tamper protection against opening and removal from mounting surface
- configuration of detection circuit sensitivity with onboard potentiometers
- low current consumption
- can be mounted directly on flat surface or, optionally, using the:
  - angle-type bracket
  - adjustable holder **BRACKET A**
    - tilt angle adjustment within approx.  $30^{\circ}$
    - swivel angle adjustment within approx.  $90^{\circ}$
    - optional wall- or ceiling mounting of detector



- adjustable holder **BRACKET B**
  - inner cable duct
  - fully enclosed design for better appearance of installation
  - tilt angle adjustment within approx. 30°
  - swivel angle adjustment within approx. 90°
  - optional wall- or ceiling mounting of detector
- **BRACKET E** set
  - **BRACKET E-1** (GY) – body for attaching the BRACKET E-2A inserts
  - **BRACKET E-2A** (GY) – insert for the mounting AGATE curtain detectors
  - **BRACKET E-3** (GY) – 30 mm distance piece enabling the detector to be distanced from the wall or ceiling
  - **BRACKET E-4** (GY) – 20 mm mounting base
  - **BRACKET E-6** – tamper sensor with NO/NC switch and 500 mm long cables
- option to mount **HOOD A** protective cover on the detector enclosure

Supply voltage	12 V DC
Detected target velocity	0,2...3 m/s
Operating temperature range	-40...+55 °C
Recommended mounting height	2,4 m
Standby mode current consumption	21 mA
Max. current consumption	25 mA
Weight	92 g
Maximum humidity	93±3%
Dimensions	44 x 105 x 40 mm
Environmental class according to EN50130-5	IIla
Alarm signalling time	2 s
Complied with standards	EN50131-1, EN 50131-2-4, EN50130-4, EN50130-5
Microwave frequency	24,125 GHz
Warm-up period	45 s
IP code	IP54
Security grade (detector mounted directly to the wall)	Grade 3