

General description

The COSMOS DT, model numbers RK210, RK215 and RK225, is a movement detector, based on double technology: the detector combines a microwave module (based on Doppler technique) with a PIR (Passive Infrared) detector, which works in combination with a Fresnel lens mounted on the front of the detector.

Alarm will be generated when both the PIR and the MW will detect movement.

The Doppler detector is based on an X-band transmitter and receiver, which will detect very small differences between the transmitted and received frequencies detected when there is movement in the coverage area. The module is manufactured by Agilis or Microwave Solutions. They are interchangeable.

The three models are implemented using the same module, and the difference between them is the lens used for the infrared part.

The built-in antenna is on the print of the module (patch antenna), and it's built up with the four squares you can see on each corner of the module.

The detector operates using a 12 V DC external power supply, and gives indication of alarm by closing the contacts of a relay. Additional "tamper" indication is given as a normally-closed contact, which will open as a result of any attempt to open the plastic enclosure.

The different detection ranges are achieved by using a different lens for each range, as well as using a trimmer mounted on the PCB which allows fine tuning of the activation distance.