

PASSIV-RADAR

SILENT GUARDIAN

Passive detection
of moving objects



AREAS OF APPLICATION

AIRPORTS

- ☀ MONITORING of the close area of operation
 - » Arrival and departure area
 - » Buildings & complexes
 - » Detection of drones

INFRASTRUCTURE MONITORING

- ☀ MONITORING of critic objects and terrain
 - » Industrial facilities
 - » Government areas
 - » Buildings & complexes
 - » Stadiums and major events



BORDER AND COASTAL SURVEILLANCE

- ☀ DETECTION of flying, moving and swimming objects
- ☀ ILLUSTRATION of all flight movements in the lower airspace

mobile solution
available



Purpose

Passive early warning of movements
in the dimensions air, land and sea
| undetectable receiver

Are you interested and would you like to find out more about our product? Feel free to contact us or visit our website.

Parasol GmbH & Co. KG

Jens-Patent-Weg 6
25821 Bredstedt
+49 4674 96 29 - 20
kontakt@passivradar.de
www.parasolsystem.de



Our System

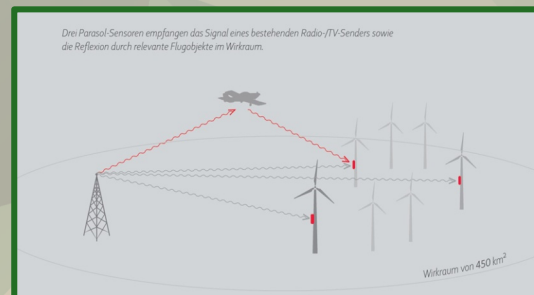
COMPONENTS

- » 3 sensor sites
- » 3 reference units



FUNCTION

☼ The Parasol System consists of three sensor sites, each consisting of a sensor and a reference unit. The reference unit receives the direct signal from the transmitter (e.g. TV oder radio). The sensor unit receives the signal reflected from the flying or ground object. For an exact determination of the position, three sensor units are implemented forming a multistatic system. Moving objects create a Doppler effect, which allows the calculation of the target's speed and direction. The received signals are transformed to the range-Doppler domain in order to enhance the effectiveness and precision. Due to the data fusion a high accuracy and reliability is achieved.



Advantages

- ☼ Usage of existing signal sources (DVBT-1-2, DAB + or others)
- ☼ Undetectable receiver
- ☼ Detection area up to 1000 km²
- ☼ 3D-detection of moving objects or objects on the ground from 0,5 m² radar reflection surface
- ☼ Low service costs
- ☼ Patented by Parasol
- ☼ Installation outside the detection area

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