MicroRadar

Portable Radar Unit

- Tailored for person detection at short ranges
- Easy control and optimization of detection schemes
- Three detection modes:
  Full, on trig, low-power

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MICRORADAR
PART OF THE FLEXNET PLATFORM

The Flexnet Microradar is a small size portable radar unit optimized for person detection at short ranges. It works independently inside the Flexnet network. The MicroRadar gives you Cursor on Target information directly into Flexnet Commander. Tracks can be replayed to verify any events in specific areas.

With its exclusion and inclusion zones it is easy to control and optimize the detection schemes. A range limit can be set in order to give alarms when objects are closer than the limit, enabling the user to filter out activity outside the range of interest.

The Microradar provides 5 separate channels which allows for 5 devices operating with overlapping range to cover a larger area. As all other Flexnet devices, it operates as an individual node in the mesh network, relaying data from the other sensors (Mini/Scout/PIR) back to the base station.

The MicroRadar features three detection modes:

Full detection: Optimal mode for detection, the device is continuously on and does not automatically turn off if no tracks are found.

Detection on trig: The device is turned off, full detection is started when triggered by another sensor within the system. The radar will go back to power off after 10s without objects in its FoV. Ideal when low radio EMC profile is required.

Low-power detection: The device automatically works on a cycle in order to save power. Power off for 4s then fully on for 2s. Full detection is activated when an object is detected and then, the radar will go back to the power save cycle after 10s without objects in its FoV.

Technical specifications

Size	170 x 80 x 70mm
Weight	1kg
Operation time	**Full detection**: ~1 day
	Detection on trig: ~20-30 days (up to 40 days with external battery)
	Low-power detection: ~5 days
Temperature	-32 to +71° Celsius in operation
Environmental	MIL-STD-810
EMC	MIL-STD-461

Performance

⟶ **Field of View - 90°**
⟶ **Person detection up to 50m**
⟶ **Adjustable range trigger limit**
⟶ **Exclusion and inclusion zones**
⟶ **Tracking of targets in Flexnet Commander**

On-demand adaptations

⟶ Vehicle optimized mode - Mode run separately or simultaneously with the person detection mode, which optimizes the detection of vehicles.
⟶ Fusion of alarms from several devices to create a homogenous detection zone from the separate devices.

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