

PBDR - Persistent Border Detection Radar

■ SFX-2114



**Safex**

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General

The SFX-2114 persistent border detection radar is a new and advanced high resolution radar with unique and outstanding capabilities. Featuring simultaneous multibeam technology, it provides persistent surveillance and instantaneous target tracking over the entire region of interest (ROI). This technology allows immediate and simultaneous detection, monitoring and tracking of all moving ground targets in the ROI, in tough weather conditions.

The SFX-2114 is equipped with a stationary (non-rotating) planar array covering a sector of 90°, with detection range capabilities of (up to) 500 meters for a moving human, and up to 1000 meters for moving vehicles.

The SFX-2114 is characterized by high reliability and no required maintenance.

Features

- Multibeam solid-state FMCW RADAR
- Low false alarm rate
- Maintenance-less with low Life Cycle Cost (LCC)
- Instantaneous and continuous coverage
- High probability of target detection of non-persistent target interception in tough weather conditions
- High accuracy, automatic and continuous multi-target detection and tracking
- Simple deployment and operation
- Interoperability with electro-optic sensors and command and control (C4ISR etc.) systems
- Command and Control application, providing a tactical picture of several networked radars and cameras

Technical Specification

- Detection range:
 - Human: RCS 0.5-1 m² Max: 300~500 m
 - Vehicle: RCS 10 m² Max: 600~1000 m
- Range accuracy: 0.5 m
- Azimuth coverage: 90°
- Azimuth accuracy: 1°
- Elevation coverage: 15°
- Minimum radial velocity: 0.5 m/sec
- Frequency band ISM: 24.05~24.25 GHz
- Size (w h d): 17 x 13 x 5 cm
- Weight: 1 Kg
- Power consumption: 12 w 48v DC
- Environmental temperature: -30°~+50° c
- Certification mark CE & FCC&KC
- Communication & power: Ethernet cable with POE