

PERSISTENT WIDE AREA LAND & MARITIME SURVEILLANCE RADAR SERIES

■ SFX-2112



Safex

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■ SFX-2112

General

SAFEX, SFX-2112 is a new family of advanced high resolution radars with unique and outstanding capabilities. Featuring simultaneous multi-beam technology, the radars provide persistent surveillance and instantaneous target detection and tracking over a wide area.

The radars are designed for simultaneous dual use operation of ground and sea surface surveillance, even in adverse conditions.

The radars instantly detect, monitor and track all moving targets in the Region of Interest (ROI), such as walking persons, swimmers, moving vehicles and various vessels and boats at sea.

The radars cover detection ranges from 300m up to 15,000m for a moving person and a rubber boat and ranges of up to 30,000m for a moving vehicle or a sailboat, depending on the radar model.

The radars are capable of automatically adapting their processing (ground moving target detection or sea surface target detection) according to the relevant background map.

This new radar family reflects SAFEX vast experience in surveillance radars and signal processing, utilizing cutting edge radar technologies and innovative design, and are in operational use by military, paramilitary and security agencies worldwide.

Features

- Operation under all weather conditions
- Instantaneous and continuous coverage of the entire Region of Interest
- Surveillance sector programming - sectors of interest and alert areas can be programmed and identified
- Stationary planar arrays (up to 4), each covering instantaneously 90° by multi-beam technology providing up to 360° instantaneous coverage
- Automatic and continuous detection and tracking with high accuracy
- Easily deployed and operated
- Several radars can be networked, providing an integrated picture in a single C2 post
- Local and remote operation modes
- Implementation of 2D and 3D background digital maps (option)
- Low false alarm rate
- Interoperability with Electro-Optic (E/O) sensors and easily integrated in surveillance systems
- Low Life Cycle Cost (LCC)
- Redundancy resulting in graceful degradation

Installation

- Fixed installation on top of a tower or on a building
- Mobile installation on a surveillance vehicle - operating while stationary
- Portable configuration operated on a tripod

Applications

- Battlefield surveillance
- Ground and coastal border security systems
- Site perimeter protection
- Critical infrastructure protection
- Low flying aircraft detection within the beams

Specifications

- Frequency Band : X Band or C Band
- Sector Coverage : Instantaneous 90° or 180° or 270° or 360°
- Range Accuracy : 1 - 2 m
- Azimuth Accuracy : 2 - 5 milliradians
- Nr. of Tracked Targets : ≥ 500

Maximum Detection Ranges

Radar Version	Swimmer	Rubber Boat/ Walking Person	Sail Boat/ Moving Vehicle
SFX-2107	N/A	300	600
SFX-2112 (V1)	N/A	1,000	2,000
SFX-2112 (V2.5)	375	2,500	5,000
SFX-2112 (V5)	750	5,000	10,000
SFX-2112 (V10)	1,500	10,000	20,000
SFX-2112 (V15)	2,250	15,000	30,000
SFX-2112 (V22)*	3,000	22,000	44,000

* Sea only



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