



SAIR-2D



Developed from proven and state-of-the-art technologies, the new SAIR-2D is a Fully Solid State X-Band radar. A back-to-back antenna system with state-of-the-art flat planar array allows air + surface search and tracking. It is designed for coastal surveillance and on board applications.



General Features

- 2-D, fully coherent, software defined functionality, pulse compression radar
- Dual channel Solid State X-Band transceivers for **air+surface** detection
- Dual antenna system with csc^2 beam squintless H-Pol array and fan beam C-Pol array
- Surface channel and air targets simultaneous processing
- MTI and MTD processing
- Adaptive anti-clutter and echo enhancement processing
- Fully solid state transmitter
- Integrated BITE system
- ECCM resistant
- IFF option
- Frequency agility
- Close range helicopter guidance and SAR mission
- Compliant with applicable MIL Standards for military equipment
- Dual redundant/fault tolerant option for coastal operations

SAIR-2D

TX (Surface + Air Channels)

• Frequencies	programmable within 9200÷9500 MHz
• Maximum Transmission Power	800 W peak power

Receiver (Surface + Air Channels)

• Sensitivity	< -130 dBm
• Noise Figure	< 4.5 dB
• Dynamic range	> 120 dB
• Receiver bandwidth	30 MHz (nominal)
• A/D conversion on IF	16 bit

Tracker

• Surface and air targets	> 1000 tracks
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Antenna system

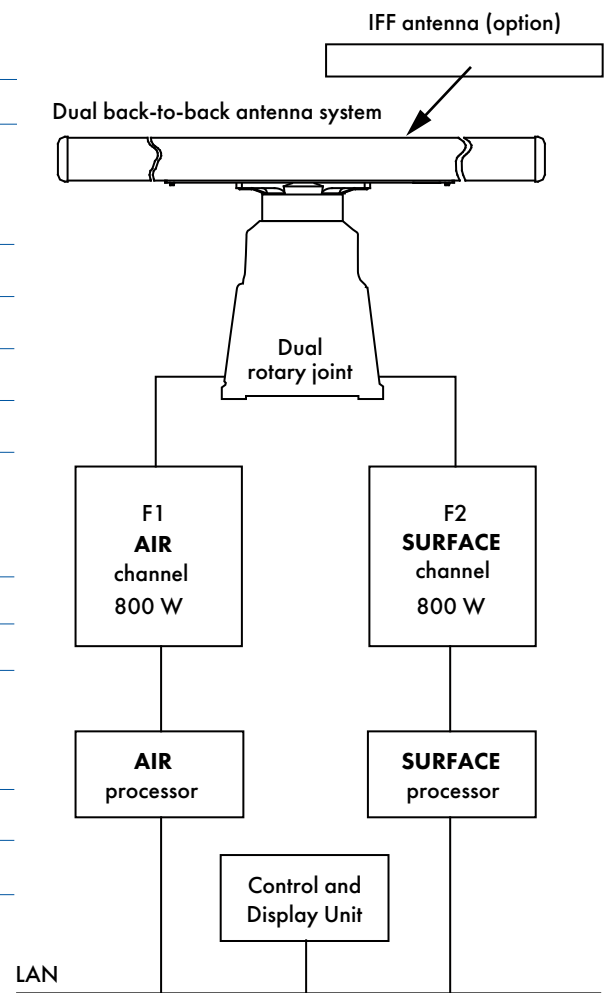
• Dual X-Band 6' antenna in back-to-back configuration	
• Array 1: planar, csc ² beam, squintless, horizontal polarization	
• Array 2: slotted, fan beam, circular polarization	
• Rotation speed	10 ÷ 40 RPM

Interfaces

• Ethernet
• Serial RS232, RS422

Options

• IFF antenna
• Stabilizing platform (for naval application)



Surveillance & Security

Guidance, Navigation & Positioning

Military & Defence

Marine Electronics

This brochure should not be considered a contractual offer to sell. The specifications given herein may be changed by the manufacturer, GEM elettronica S.r.l., without notice.



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