



# Lanza Radar PSR 3D

## **Innovative 3D Radar for Control Approach & Air Surveillance**

The PSR 3D is a Primary Surveillance Radar from Indra's Lanza family of 3D radars that has been designed following ICAO and EUROCONTROL requirements, providing additional capabilities compared to a traditional Airfield Surveillance Radar.



## Lanza Radar PSR 3D

**Secure.** It determines flight height, providing air controllers with complete position information even with non-cooperative aircrafts.

**Protected.** The use of pencil beams, reduces the probability of radar transmissions/ receptions being affected by intentional or natural interferences. It also provides frequency diversity of more than 100 operating pairs of frequencies, an inherent protection against interferences of frequencies being disturbed. Additionally, the PSR 3D can be configured to provide ECCM capabilities such as Side Lobe Blanking and Frequency Agility, only available in Air Defence radars.

**Mission:** Approach Control and Extended Range Surveillance.

Two operational modes; up to 100 Nm and up to 150 Nm instrumented range. ICAO and EUROCONTROL compliant. Interoperable with Air Traffic Management and Air Defence systems.

**Robust.** It operates in the L-Band, providing better detection under extreme weather conditions, and uses pencil beams electronically steered in elevation which minimizes the surface clutter and improves detection of low altitude aircrafts.

**Flexible.** It is configured to provide two selectable operational modes. A Terminal Control Mode (TCM) for Control Approach and an Extended Range Mode (ERM) for Medium Range Air Surveillance.

### System Performance Features

- Overall fulfillment of ICAO and EUROCONTROL requirements
- Communality with other members of Lanza Radars family
- Planar array antenna with 3D Pencil Beam Technique
- Designed to support an LVA Secondary Radar antenna providing interfaces for joint PSR and SSR/IFF operation
- L-Band Radar (1 250 to 1 350 MHz)
- Distributed solid state transmitter and receiver, soft fail degradation
- Redundancy in system design providing Operational Availability over 99.99%
- Weather Processor providing 6 levels of intensity mapping
- Frequency Diversity and Anti-clutter capabilities
- Additional ECCM capabilities available

### Operational Features

- Two configured operational modes:
  1. Terminal Control Mode (TCM):  
Instrumented Range: 100 NM  
Rotation rate: 12 rpm  
Maximum Height: 60,000 ft
  2. Extended Range Mode (ERM):  
Instrumented Range: 150 NM  
Rotation rate: 7.5 rpm  
Maximum Height: 80,000 ft
- Local and remote Radar Control Console
- Standard radar data output



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