

# HTRS | 100

AIR TRAFFIC CONTROL RADAR SYSTEM

#Radar



**aselsan**

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## AIR TRAFFIC CONTROL RADAR SYSTEM

ASELSAN Air Traffic Control Radar System HTRS 100 ensures the precise detection and tracking of all airborne targets in the vicinity of airports. The system integrates cutting-edge technologies to guarantee maximum reliability and performance.

### Key Components:

- **Preliminary Surveillance Radar (PSR):** Operating in the S-Band, this radar ensures clear and reliable target detection and tracking even in the most challenging environments, thanks to its advanced and innovative clutter suppression algorithms and target tracking algorithms.
- **Secondary Surveillance Radar (SSR):** This radar enhances aircraft tracking capabilities through Identification Friend or Foe (IFF) interrogation, supporting multiple modes for versatile operations.

### Technical Specifications:

- **Operating Frequency:** 2700 to 2900 MHz
- **Detection Range:** Configurable to 80 or 100 Nautical Miles
- **SSR Modes:** 1, 2, 3/A, 5 (Level 1 and Level 2), C, and S
- **Mean Time Between Critical Failures (MTBCF):** Over 40,000 Hours
- **Mean Time to Repair (MTTR):** Less than 30 Minutes
- **System Availability:** >>99.999%

### General Features:

- Full Compliance with **ICAO** and **Eurocontrol** Standards
- **Weather Channel** Dedicated for Accurate Atmospheric Monitoring
- Comprehensive **Data, Event, Audio, and Video Recording** Capabilities
- Detailed **Built-in Self-Diagnostics** for Real-Time System Monitoring
- Uninterrupted Operation and Significantly Higher Availability Compared to Its Counterparts, Thanks to The **Distributed Active Hot-Redundant Design In A Matrix Structure** for PSR and SSR Components, Instead of The Traditional Channel-Based Redundancy.
- **Graceful Degradation** Capability, Supported by Solid-State Transmit Power Modules for Uninterrupted Performance
- Exceptional **Range and Angular Resolution**
- Both Moving and Stationary Clutter Suppression with **Advanced Clutter Suppression Techniques**.
- **Wind Turbine and Bird Detection Algorithms** to Enhance Operational Safety

