

AN/DPX-7

Reduced size transponder

Mode 5 | Mode S | ADS-B | GPS



The reduced size transponder (RST) with the GPS appliqué is BAE Systems' latest IFF offering.

The RST incorporates features required for tomorrow's global military and civil air traffic control requirements. It provides Mode 5, Mode S, and ADS-B functionality in a much smaller unit at a lower cost than current military transponders.

Using the RST with its optional GPS appliqué enables a significant cost savings for ADS-B upgrade programs by not impacting the existing navigation and flight management systems.

The RST features an ADS-B passive receive capability that supports situational awareness and sense-and-avoid applications. The system is ideal for platforms with size, weight, and power constraints.

Features

- Reduced SWaP provides a solution for constrained platforms
- ADS-B out per RTCA/DO-260B
- Elementary surveillance (ELS) and enhanced surveillance (EHS) compliant
- Growth to support UAT ADS-B In
- Interchangeable platform interface module allows for drop-in replacement of existing transponders or customization
- MIDS/JTIDS compatible
- Multiple interface buses available including MIL-STD-1553, ARINC 429, Ethernet, RS-485, and RS-232
- Optional remote control unit for use on nondata based aircraft
- GPS appliqué offers a significant cost savings by not impacting the existing navigation and flight management systems
- Open slot for platform expansion appliqué
- Qualified for fixed wing, rotary wing and shipboard applications

Specifications

Transmit power	57±2 dBm per DoD AIMS 03-1000
Weight	Less than 7 lbs with crypto and GPS appliqués installed
Dimensions	5.375" H x 5.375" W x <4.000" D
Power	28 VDC, IAW MIL-STD-704A-F
Maintainability	Front panel BIT activation and LRU/WRA status indicator for rapid verification of operational readiness
Temperature	Operating -50°C to +71°C MIL-STD-810G
EMI	MIL-STD-461F
Shock, vibration	MIL-STD-810G
Supports	Modes 1, 2, 3/A, C, and Mode 5 (Level 1 and 2) Mode S Level 2 and interface to TCAS II system per RTCA/DO-181 1090 MHz receive for ADS-B, ADS-R TIS-B and growth to Mode 5 Level 2 broadcast in ASSAP processor for ARINC CDTI track Output supporting DO-317 AIRB and TSAA applications
Certifications	DoD AIMS 17-1000 FAA TSO -C112 and TSO-C166

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