

AN/APX-127(V)1

Combined interrogator/transponder

F-16 configuration



The AN/APX-127(V)1 CIT system has the same form factor and can be a drop-in replacement for the AN/APX-113(V), AN/APX-125, and AN/APX-126.

The **AN/ APX-127(V)1** is the latest generation Combined Interrogator/Transponder (CIT) within our Advanced Identification Friend or Foe (AIFF) product line. The AN/APX-127(V)1 was designed to be the next iteration of AN/APX-125 and AN/APX-126 CITs. It is a versatile identification friend or foe (IFF) system developed for the F-16 Fighting Falcon and deployable on other new and legacy platforms.

The AN/APX-127(V)1 CIT system supports SIF, Mode S and Mode 5 operation. The system utilizes Mode 5 to prevent fratricide and improves identification of coalition forces, helping determine targets in the immediate battlespace and well beyond a pilot's visual range. Our CIT family of products, the AN/APX-113(V), AN/APX-125, and AN/APX-126 are currently operating on U.S. and international platforms including multiple F-16 blocks, derivative aircraft, and a variety of Foreign Military Sales applications.

Features

- Complete Mark XIIIB identification system in one unit
- Ethernet connection port to meet Open Interface Standards
- New, modern design with drop in capabilities for AN/APX-113(V), AN/APX-125 and AN/APX-126 CITs
- Capable of ADS-B In/Out, M5 L2-B (In/Out), and UAT In
- Multiple antenna configurations (electronic or mechanical scan)
- Dual-redundant MIL-STD-1553 bus interface and Ethernet
- Reply evaluation and degarbling
- AN/APX-127(V)1 utilizes the KIV-78 crypto applique
- Cyber resilience supports current and foreseeable cyber requirements without additional hardware changes
- Modernized design with additional growth potential for multi-

Specifications

Unit	Combined interrogator/transponder (CIT) Beam-forming network (BFN) Fuselage-mounted antenna elements (FMA) Optional Lower interrogator antenna (LIA)	
Interrogator antenna	Number of antenna elements Lower antenna (optional)	4 Conformal
Dimensions and weight	CIT: 8.26 inches height x 6.00 inches width x 14.50 inches depth, 25 pounds BFN: 6.50 inches height x 8.38 inches width x 4.00 inches depth, 10 pounds FMA: 1.55 inches height x 3.25 inches width x 13.10 inches depth, 0.5 pounds LIA: 0.60 inches H x 17.00 inches width x 14.00 inches length, 10 pounds	
Certification	DoD AIMS 17-1000 certification	
Transponder subsystem	Front-panel transmit Front-panel receive Modes 1, 2, 3/A, C, S (ELS/EHS), 5 L1/L2 and national secure mode	500 watts -80 dBm
System parameters	Prime power Voltage Consumption Forced-air cooling Integral fan	28 volts direct current 132 watts CIT unit only Optional

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