

# AN/APX-113(V)

## Combined interrogator/transponder F-16 configuration

### FEATURES

The AN/APX-113(V) combined interrogator/transponder (CIT) is a versatile identification friend or foe system specifically developed for the F-16 Falcon. It is currently used for the Block 15 A/B MLU, Block 20 A/B, Block 30/32, Block 40, Block 50/52 C/D, and Block 60 aircraft. The system's versatility is demonstrated by other applications that include ASW and surveillance helicopters, aerostats, Mig-29s, Japan's F-2 fighter, and other international platforms. The AN/APX-113(V) CIT includes Mode S elementary and enhanced surveillance (ELS and EHS) and Mode 5, ensuring that the AN/APX-113(V) CIT will be as capable tomorrow as it is today.

Complete Mark XII or Mark XIII identification system (including crypto computers) in one unit

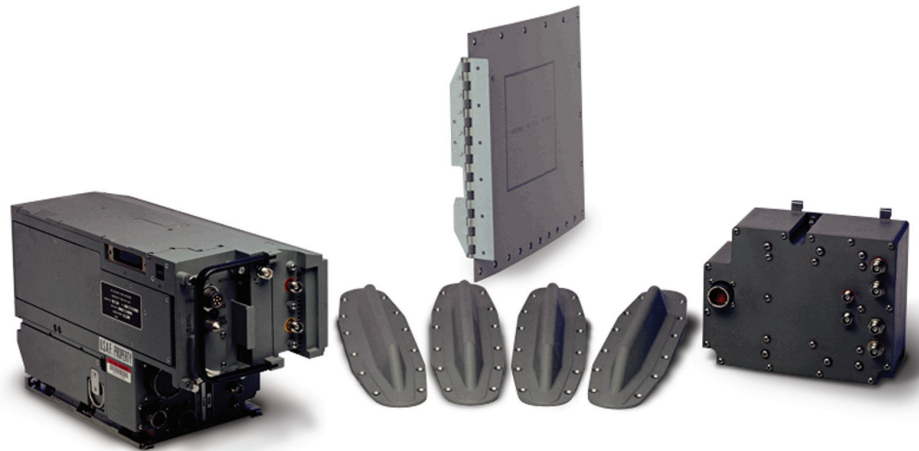
DoD AIMS-certified  
STANAG 4193-compliant

Includes Mode S, Level 3 (ELS and EHS)

Multiple antenna configurations  
(electronic or mechanical scan)

Ada software

Dual-redundant MIL-STD-1553 bus interface



AN/APX-113(V) CIT system

## SPECIFICATIONS

### Unit

- Combined interrogator/transponder
- Beam-forming network
- Fuselage-mounted antenna elements
- Lower Interrogator antenna

### Interrogator subsystem

- Detection range >100 nmi
- Sector coverage  $\pm 60^\circ$  AZ,  $\pm 60^\circ$  EL
- Azimuth accuracy  $\pm 2^\circ$
- Range accuracy and resolution <500 ft. (152 m)
- In-beam targets 32
- Modes 1, 2, 3/A, C, 4 and 5

### Interrogator antenna

- Number of antenna elements 4
- Lower antenna Conformal

### Interrogator unique features

- Front-panel transmit 2.4 kW min.
- Front-panel receive -85 dBm typ.
- Monopulse receive, AJ protection, Mode C altitude report, reply evaluation and degarbling

### Dimensions and weight

- 8.26" H x 6.00" W x 14.50" D, 32 lbs.
- 6.50" H x 8.38" W x 4.00" D, 10 lbs.
- 1.55" H x 3.25" W x 13.10" D, 0.5 lbs.
- 0.6" H x 17" W x 14" L

### Transponder subsystem

- Front-panel transmit 500 W
- Front-panel receive -76 dBm
- Modes 1, 2, 3/A, C, S, 4 and 5

### System parameters

- MTBF
  - System 1,600 hr.
  - CIT only 2,000 hr.
- MTTR 0.25 hr.
- Fault detection 97%
- Fault isolation 99%
- Prime power
  - Voltage 28 Vdc
  - Consumption 200 W
- Forced-air cooling CIT unit only
- Integral fan Optional

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