



APX-119 TRANSPONDERS

EMPOWERED BY INNOVATION

Discover the benefits of advanced transponder technology

When it comes to connecting aviation, Collins has the industry-leading communications technology and experience you're looking for.

Our APX-119 transponders incorporate full Mk XII, Mode 5, Mode S and ADS-B capabilities and feature a flexible, open systems architecture -- enabling cooperative identification and increased safety across a range of aircraft platforms.

Collins Aerospace has leveraged more than 50 years of Identification Friend or

Foe (IFF) experience in the development of the APX-119 digital transponder family. The combined Mk XII/ Mode S/Mode 5/ADS-B capability enables aircraft to operate seamlessly throughout domestic and international, civil and military airspace, while meeting all IFF and ATC requirements.

The APX-119 operates with the KIV-77 Mode 5 crypto appliqué. The appliqué design reduces the logistics requirements associated with an embedded COMSEC approach. The APX-119 has an existing installed base of over 15,000 units on more than 150 different platform types for the U.S. Department of Defense (DOD) and multiple international users.



KEY FEATURES & BENEFITS

- AIMS certified, TSO approved
- Optional embedded GPS
- Supports commercial derivatives and military-unique platforms
- Hosts Mode 5 and NMS secure appliqué
- Mode S elementary/enhanced capability via ARINC 429 or MIL-STD-1553B
- Plug-and-play solution for transponder upgrades
- Selectable front panel maximizes compatibility with aircraft interfaces
- Supports various panels, with growth slots to meet future requirements



APX-119 Transponders

FRONT PANEL CONFIGURATIONS



Standard 429 front panel



MIL-STD-1553B front panel



eGPS front panel



Special mission front panel

DESCRIPTION

- Fully compliant with DO-181E, DO-260B and DO-185B/TCAS II compatible
- U.S. DOD AIMS-03-1000B, amendment 1 certified, and NATO STANAG 4193 compatible
- TSO approvals; TSO-C112e, TSO-C166b and TSO-C145d (eGPS)
- Fit and form replacement for existing APX-100 and APX-101 transponders
- Compatible upgrade for APX-64, APX-72, APX-108 and panel mount transponders
- MIL-STD-1553B, RS-485, RS-232, ARINC 429, discrete and Ethernet interfaces
- Demonstrated MIDS/FDL/JTIDS compatibility
- Highly demonstrated field reliability
- Multiple ARINC 429 ports for direct connect to avionics

GENERAL SPECIFICATIONS

Primary power	+18 to +32 VDC, 30 W nominal; 50 W maximum
Transmit center frequency	1090 +/-0.1 MHz
Receiver frequency	1030 +/-0.05 MHz
Peak power output	57 ±2 dBm
Electromagnetic compatibility	MIL-STD-461E and DO 160E
Temperature range	-40°C to +71°C
Dimensions (H x W x D)	5.375 in x 5.375 in x 8.375 in (13.65 cm x 13.65 cm x 21.27 cm)
Weight	10 lbs (4.5 kg)

Specifications subject to change without notice.