

IFF Mk XIIA(S)

TRANSPONDER





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Mode 5/S IFF Transponder satisfies military and civilian air traffic control systems' needs while supporting Mode 1, Mode 2, Mode 3/A, Mode C, Mode S and encrypted Mode 4/Mode 5.

Mode 5/S IFF Transponder can easily be adapted for Reverse IFF (STANAG 4722) requirements by software upgrade.

Having advanced controlling system, Mode 5/S IFF Transponder can be controlled over Ethernet, MIL-STD-1553 data bus or Remote Control Unit.

Technology

IFF Transponder includes; FPGA, DSP, Microprocessors with high processing power; ADC/DAC with high sampling rate and digital modulation/demodulation techniques. Functions are fulfilled in one device for all modes of IFF and therefore flexibility and reliability are significantly provided.

General Specifications

- STANAG 4193 Edition 3 compatible
- Capability of Mode 4/5 operation with M5K-II Plug-In Crypto Device
- Supports Mode 5 Level 1 and Level 2
- Supports Mode S Level 2
- ADS-B Transmit Feature
- Control Interfaces:
 - Remote Control Unit
 - MIL-STD-1553
 - Ethernet
- Works with TCAS via ARINC-429 Interface
- Works with ADLP via ARINC-429 Interface
- NMEA 0183 GPS Interface Compatible (Asynchronous RS422)
- Transmission and Reception Bottom/Top Antenna Diversity Feature
- BIT (Built-in Test) Capability

Technical Specifications

Transponder

- Operating Frequency : 1090 MHz (transmission)
: 1030 MHz (reception)
- RF output power (peak) : 500 W \pm 2 dB nominal
- Transmission duty cycle : %1
- Supply Voltage : 28 VDC MIL-STD-704A
- Operating Temperature : - 40°C to +70°C
- Shock, Humidity, Vibration : MIL STD 810G
- EMI/EMC : MIL STD 461E

Remote Control Unit

- Supply Voltage : 28 Vdc
- Night Vision (NVIS) : Exists