

IFF Mk XIIA(S)

SHORT-MEDIUM RANGED INTERROGATOR





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Mode 5/S IFF Interrogator is a Short-Medium Range Interrogator which meets today's air defense needs with Mode 5/S features. Mode 5/S IFF Interrogator is compatible with STANAG 4193 Edition 3 and supports Mode 1, Mode 2, Mode 3/A, Mode C, Mode S and encrypted Mode 5.

IFF Interrogator works coordinately with the primary sensor in the platform. Interrogator has "Automatic/Manual" and "Interlace/Supermode" interrogation management capabilities depending upon operational needs.

IFF Interrogator has "RSLs/ISLS", "Defruiting", "GTC" and "Mode 5 Reply Evaluation" capabilities.

Technology

IFF Interrogator 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 in all modes of IFF and therefore flexibility and reliability are significantly provided.

General Specifications

- STANAG 4193 Edition 3 compatible
- Capability of Mode 5 operation with M5K-II Plug-In Crypto Device
- Supports Mode 5 Level 1 and Level 2
- Supports Mode S
- ADS-B Receive/Process Capability
- Control Interfaces:
 - Application Layer Protocols: ASTERIX (Category 007, 048, 021 and 253), NMEA 0183
 - Synchronous RS-422
 - Ethernet
- NMEA 0183 GPS Interface Compatible (Asynchronous RS422)
- Sum and Diff Antenna Interfaces (RSLs, ISLS capability)
- Antenna Rotation Info: ACP/ARP Serial or 14 byte Parallel
- Capability to work with Electronic Scanning or Mechanical Rotating Antenna
- Digital Target Reporting Sliding Window/Monopulse Processing
- Automatic/Manual Interrogation
- Supermode/Interlace Interrogation
- BIT (Built-in Test) Capability

Technical Specifications

- Operating Frequency : 1030 MHz (transmission)
: 1090 MHz (reception)
- RF output power (peak) : 500 W \pm 2 dB nominal
- Transmission duty cycle : %1
- Supply Voltage : 28 Vdc MIL-STD-1275E
- Operating Temperature : -40°C to +63°C
- Operating Altitude : 11 500 ft
- Shock, Humidity, Vibration : MIL STD 810G
- EMI/EMC : MIL STD 461E

