





# IFF Mk XIIA(S)

## LONG RANGE INTERROGATOR

Mode 5/S Long Range 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 4/Mode 5.

Mode 5/S Long Range IFF Interrogator can coordinately work with the primary sensor or can be used as a standalone interrogator by means of an on the shelf software.

Mode 5/S Long Range IFF Interrogator is a single unit consisting of Line Replaceable Units (LRU) and has the ability to perform "RSLs/ISLS", "Defruiting", "GTC" and "Mode 4/5 Reply Evaluation" functions.

### Features

- STANAG 4193 Edition 3 Compatible
- Capability for all Mk XIIA Modes
- Capability of Mode 4/5 operation with M5K-II Plug-In Crypto Device
- ADS-B Reporting Capability
- Supermode Capability
- Interface Capability
- Digital Target Reporting
- Video Transmission
- Two or Three Antenna Channel Interfaces (Sum, Difference and Omni) for both Transmission and Reception
- Electronic Steering Antenna/Mechanical Steering Antenna
- Discrete Signals to and from the Platform
- Sliding Window/Monopulse Processing
- Modular/Digital Architecture
- Built-in Test (BIT) Capability
- Dimensions: 19" Rack mountable with 6U height and 55 cm depth

### Technical Specifications

Modes	Mode 1, 2, 3/A, C, 4, 5 with Level 1 and Level 2 and Mode S
Output Power at Antenna Port	Adjustable to 500W, 1000W, 2000W or 2x2000W
Transmitter Center Frequency	1030 MHz
Receiver Center Frequency	1090 MHz
Receiver Sensitivity	≤ -82 dBm (Mk XII) ≤ -88 dBm (Mk XIIA) (90% decode measure at antenna port)
Instrumented Range	250 nautical miles
Input Power	115 / 220 VAC, 47 to 63 Hz

### Environmental/Electromagnetic

Altitude	Operating : Up to 10.000 ft Storage : Up to 50.000 ft
Temperature	Operating : -40°C to +60°C Storage : -40°C to +85°C (Batteries removed)
Environmental Qualification	MIL-STD-810G
Electromagnetic Compatibility	MIL-STD-461F

### Interfaces

- Control and Data Interface : Ethernet, Growth to RS422
- Application Layer Protocols: ASTERIX (Category 007, 048, 021, 240 and 253), NMEA 0183

### Reliability

- MTBF : > 2500 hours (MIL-HDBK-217 Calculated)
- MTTR : < 30 minutes

