



# IFF MARK XIIA System Devices

## IKZ-50P Short-range Interrogator

The IKZ-50P is a short-range IFF Mark XIIA interrogator dedicated for close-range air defense systems (SHORAD and VSHORAD). The device supports both fixed and rotating antenna systems, and provides discrete control interface for MANPAD systems. State-of-the-art digital circuitry and advanced signal processing, including monopulse detection, ensure superior accuracy, performance and noise immunity.

The IKZ-50P supports military identification in Modes 4 and 5 (with an appropriate crypto computer installed). Sophisticated built-in test (BIT) procedures and modular design ensure efficient fault detection and repair, and software updates provide future growth capability. The IKZ-50P's small size and low power consumption, combined with support for fixed and rotating antenna systems, make it a versatile short-range IFF device compatible with a wide array of air defense platforms.



### Features:

- supports Mode 4 and Mode 5 Level 1 (software-upgradeable to Level 2)
- compliant with STANAG 4193 Edition 3
- supports fixed- and rotating-antenna platforms
- state-of-the-art digital circuitry and advanced processing algorithms for superior accuracy, performance and noise immunity
- monopulse processing for accurate position estimation
- supports KIV-77/SIT2010 and compatible crypto computers for Mode 5 cryptographic security
- extensive fault detection capability through advanced built-in test (BIT) procedures
- modular design for quick repairs and easy hardware upgrades
- future growth capability through firmware updates
- standard ASTERIX protocol for broad interoperability with primary radar and C4ISR systems
- dedicated discrete control interface for MANPAD systems

## Specification

### General

Type	Short-range IFF Mark X11A interrogator
Identification capability	Mode 4, Mode 5 Level 1 (software-upgradeable to Level 2) per STANAG 4193 Edition 3

### Performance

Output power	> 50 dBm
Minimum Decoding Level	< -68 dBm
Instrumented range	25 km
Capacity	100 objects/scan; 10 in-beam targets

### Connectivity

Interfaces	Ethernet, RS-422, Option B Crypto (DoD AIMS 09-400A)
Control protocol	EUROCONTROL ASTERIX-compatible, over HDLC or TCP/IP

### Environmental

Operating temperature	From -40 to +55°C
Humidity	<98% RH
EMC compatibility	Complies with MIL-STD-461F

### Reliability

MTBF	≥ 5600 h
MTTR	< 30 min

### Physical characteristics

Power supply	28V DC, max 80 W (35 W typical)
Dimensions	225×113×174 mm (W×H×D) (206 mm with handle)
Weight	4.7 kg (without crypto)
Cooling	Natural, convection

