

IFF MARK XIIA IKZ-50P SHORT-RANGE INTERROGATOR



The IKZ-50P is a short-range IFF Mark XIIA interrogator designed for close-range air defense systems (SHORAD and VSHORAD) and is specifically tailored for integration with weapon systems and radars. It supports both fixed and rotating antenna platforms, ensuring flexible deployment.

Built for reliability and ease of use, the IKZ-50P features a robust construction ideal for demanding operational conditions. Its modular design simplifies maintenance, while an advanced diagnostic system enables rapid fault detection and troubleshooting. Integration is enhanced by its reduced size, low power consumption, and standardized connectivity via the ASTERIX protocol, ensuring seamless incorporation into contemporary weapon systems and radars. Fast response time minimizes delay, ensuring that weapon engagement is initiated without delay. When deployed with a rotating antenna, monopulse detection further enhances target azimuth estimation accuracy.

Additionally, the system offers superior noise immunity, ensuring stable performance even in challenging operational environments.

MAIN FEATURES:		
Supports Mode 5 Level 1	Compliant with STANAG 4193 Edition 3	
Supports both KIV-77 and SIT2010 cryptocomputers (DoD AIMS 04-900 Option B)	Facilitates integration with both radar and weapon systems	
Employs monopulse processing to enhance azimuth estimation accuracy in radar systems	Provides extensive fault detection through advanced built-in test (BIT) procedures	
Offers enhanced immunity to noise and jamming, ensuring reliable operation in challenging environments	Utilizes the standard ASTERIX protocol to ensure broad interoperability with primary radar and weapon systems	
Includes built-in support for Ethernet, and RS-422 (over HDLC);	Capable of sourcing time from radar systems, GPS, and cryptocomputers	

SPECIFICATION	
General	
Туре	Short-range IFF Mark XIIA 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
Bearing range (with included antennas)	100 obcjects/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

SPECIFICATION	
Environmental	
Operating temperature	From -40 to +55°C
Humidity	<98% RH
EMC compatibility	Complies with MIL-STD-461F
Reliability	
MTBF	≥ 5600 h
MTTR	< 30min
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





