

IFF MARK XIIA

IDZ-50 LONG-RANGE INTERROGATOR



The IDZ-50 is a long-range IFF Mark XIIA interrogator designed for integration with Long-Range Air Defense (LRAD) radar systems. The IDZ-50 operates in military IFF Modes 1, 2, 3/A, 5, and supports ATC interrogation formats 3/A, C, and S, expanding its operational scope. Additionally, it features passive reception capabilities (Mode 5 Level 2 and ADS-B), allowing for the tracking of air platforms without emitting detectable signals. To accommodate extended-range operations, it offers increased output power, enhanced sensitivity, and advanced processing capabilities. Its modular and robust construction, combined with an advanced built-in test (BIT) system, ensures reliable performance. Standardized connectivity is provided via the ASTERIX protocol with integrated Ethernet support, enabling seamless integration into modern radar networks and communication systems. The IDZ-50 employs monopulse detection to enhance azimuth estimation accuracy. Additionally, the system offers superior noise immunity, ensuring reliable operation in challenging environments.

MAIN FEATURES:

Supports Modes 1, 2, 3/A, C, S, and Mode 5 (up to Level 2)	Compliant with STANAG 4193 Edition 3
Supports both KIV-77 and SIT2010 cryptocomputers (DoD AIMS 04-900 Option B)	Enables passive IFF detection (Mode 5 Level 2 and ADS-B)
Employs monopulse processing for enhanced azimuth estimation accuracy	Provides extensive fault detection through advanced built-in test (BIT) procedures
Offers enhanced immunity to noise and jamming for reliable operation in challenging environments	Utilizes the standard ASTERIX protocol for broad interoperability with primary radar and weapon systems
Features built-in support for Ethernet and RS-422	Capable of sourcing time from radar systems, GPS, and cryptocomputers
Increased output power, enhanced sensitivity, and advanced processing capabilities ensure extended-range performance	

SPECIFICATION

General

Type	Long-range IFF Mark XIIA interrogator
Identification capability	Mode 1, 2, 3/A, C, S (up to Level 2) and 5 (up to Level 2) per STANAG 4193

Performance

Output power	> 61.5 dBm
Minimum Decoding Level	< -82 dBm
Instrumented range	470 km
Capacity	4000 objects/scan; 150 in-beam targets

Connectivity

Interfaces	Ethernet, RS-422, Option B crypto (DoD AIMS 04-900A), Mode 4 crypto (KIR-1C/KIN-2)
Control protocol	EUROCONTROL ASTERIX-compatible

SPECIFICATION

Environmental

Operating temperature

From -40 to +55°C

Humidity

<98% RH

Shock resistance

Up to 10 g

EMC compatibility

Complies with MIL-STD-461F

Reliability

MTBF

≥ 6500 h

MTTR

< 30 min

Physical characteristics

Power supply

28 V DC, max 200 W

Dimensions

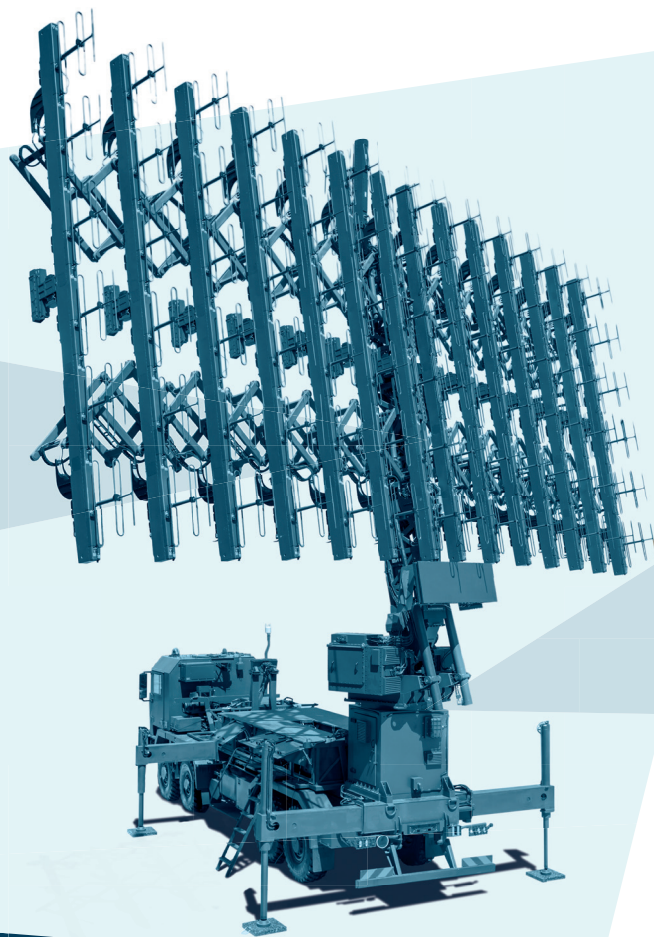
402×481×266 mm (W×H×D)

Weight

32 kg

Cooling

Active




PITRADWAR

 **PGZ**

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