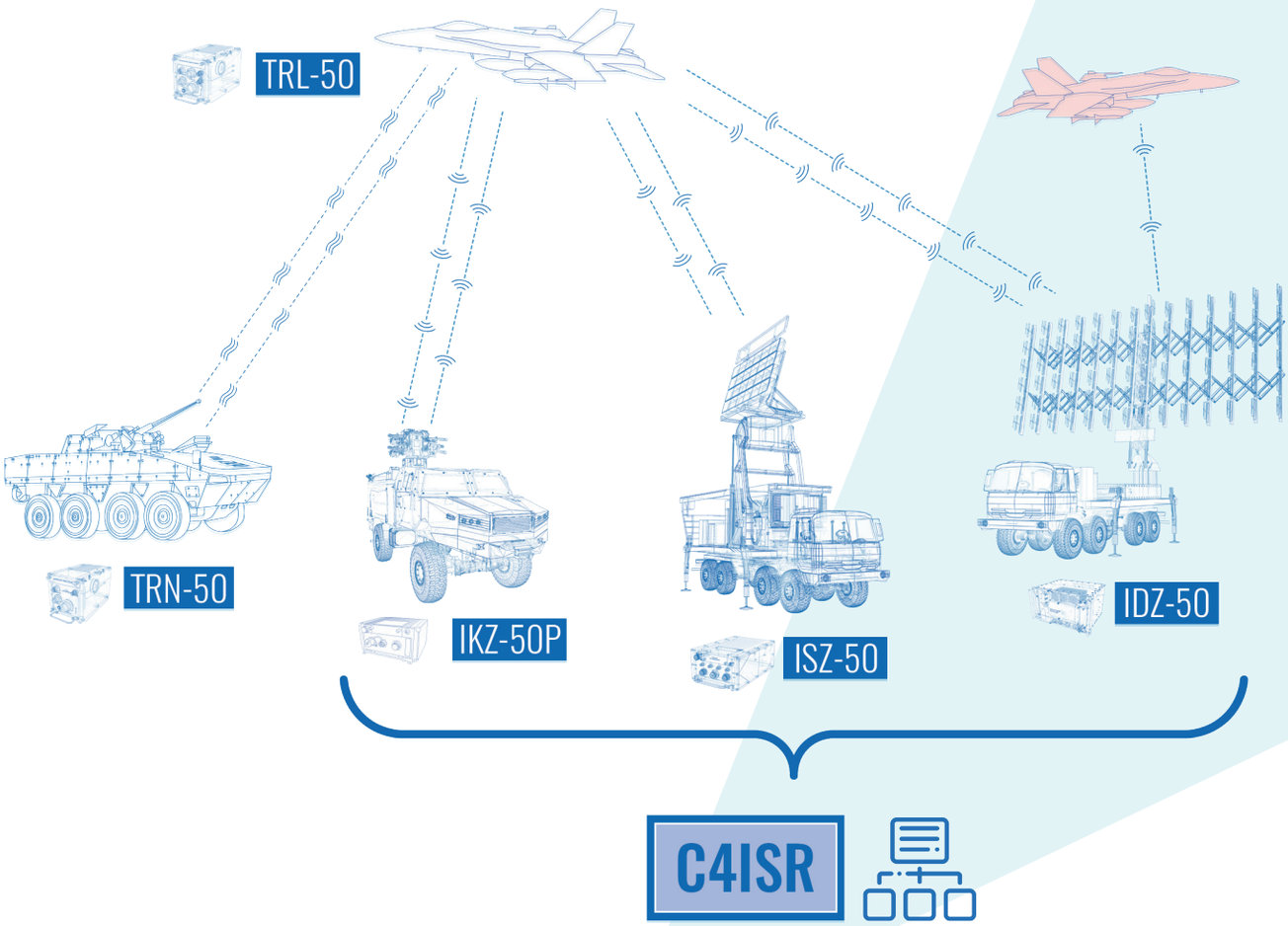
IFF Mark XIIA Family Products

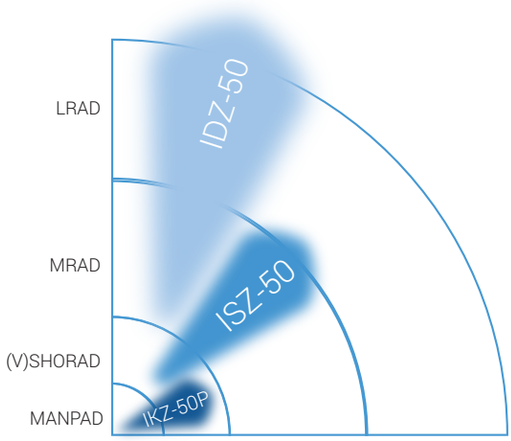
The growing complexity of modern airspace brings new challenges to both civilian air traffic control and combat identification in the battlefield. IFF and SSR devices are required to rapidly identify numerous objects with high confidence. Electronic equipment must provide superior security, reliability and immunity to interference. Networked systems require advanced communication protocols to ensure reliable and secure interoperability.

The IFF Mark XIIA standard, adopted by NATO in 2002, eliminates the deficiencies of the aging Mode 4, used for military identification since the 1960s. IFF Mark XIIA's Mode 5 combines extensive data capabilities with high reliability and strong cryptographic security. Its civilian counterpart, Mode S, provides selective aircraft identification and data reporting capabilities critical for modern-day air traffic management, and is now the dominant ATC standard around the world.

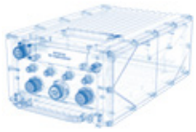
PIT-RADWAR offers a full range of IFF Mark XIIA devices that includes a family of ground/vehicle-based interrogators and aircraft/ship/vehicle-based transponders.



PIT-RADWAR's interrogator family consists of three models: the IDZ-50, ISZ-50 and IKZ-50P, dedicated for long-, medium- and short-range air defense systems, respectively. The former two support identification in Modes 1, 2, 3/A, C, S and encrypted Modes 4 and 5 (up to level 2); the IKZ-50 only supports Modes 4 and 5 due to its specific application area. All devices are built on state-of-the-art digital technology, providing rapid and accurate identification, high reliability and interoperabililty. Mode 5 cryptographic security is provided by crypto appliqués compatible with Option B i.a.w. DoD AIMS 04-900A. Modular architecture and firmware upgradeability provide growth capability to match the future evolution of IFF/SSR standards.

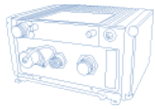


The IDZ-50 is a long-range interrogator dedicated for use with large-area surveillance radar and LRAD systems. The device's high output power and capacity make it a perfect complement to long-range primary radar systems.

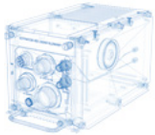


The ISZ-50 is a versatile medium-range interrogator. The device's compact packaging allows easy swapping and makes it suitable for installation in a wide range of platforms, from stationary MRAD to mobile SHORAD platforms.

The IKZ-50P is the newest addition to the interrogator family, intended for use in SHORAD and VSHORAD systems. Thanks to low power consumption and small size, it can be easily installed in highly mobile platforms or even linked to MANPAD systems. Due to the requirement to reliably identify the target immediately before engaging (to prevent friendly fire), the device only supports IFF Modes 4 and 5.



The transponder family consists of two models: the TRL-50 airborne/shipborne transponder, and the TRN-50 ground transponder.



The TRL-50 is a full IFF Mark XIIA transponder combined with a RIFF (Reverse IFF) interrogator intended for air-to-surface identification. The RIFF technology allows identification of friendly ground or sea units equipped with appropriate responders. The device supports all civilian and military identification modes, i.e., Modes 1, 2, 3/A, C, S, 4 and 5. It offers a variety of interfaces for easy integration with the installation platform.

The TRN-50 is a surface RIFF responder installable on ground and sea platforms. It can be used with the TRL-50 or other RIFF-enabled devices for identification of friendly ground units in the combat zone in order to reduce the likelihood of friendly fire.

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