

SMALL CRAFT IFF SYSTEM

We have been meeting the needs of IFF customers for over 30 years. The company offers an ever-increasing range of innovative, proven and reliable transponder and interrogator products and solutions, together with an in-depth understanding of IFF systems, performance and integration. We provide an unrivalled capability across all phases of the procurement life-cycle.

REQUIREMENTS

The battlespace is an ever increasingly complex and dynamic operational environment. Across air, sea and land domains, it is crucial to optimise situational awareness and platform identification, and to minimise incidents of 'friendly fire'. Identification Friend or Foe (IFF) systems operate in real time to provide the cornerstone of this knowledge base, offering an anti-fratricide capability.

IFF'S ROLE

IFF transponder systems provide platforms with the ability to respond to interrogations from other 'friendly' assets. This sustains greater situational awareness, based on enhanced tracking and sensing across the theatre of operation.

Platforms fitted with such an IFF transponder system can be identified, tracked and managed with much increased effectiveness and – in many cases – far beyond traditional radar horizons.

SMALL CRAFT APPLICATIONS

With an increasing number and variety of small naval and special forces craft in combat operations, there is a need to enhance the overall situational awareness picture on offensive platforms, whilst providing small craft with protection against 'friendly fire'.

The Small Craft IFF Transponder System provides a total, self-contained package to meet this requirement. The system is particularly suited to small craft due to its small, lightweight design and compact antenna.





KEY SYSTEM FEATURES

General

Compact, lightweight and portable- Suitable for rapid deployment	
Available as complete IFF system using the Remote Control Unit or can be integrated with platform systems	
Low power consumption	Operating temperature: -40°C to +56°C
Versatile platform application – fast transit craft, rigid raiders and landing craft	

Antenna

Environmentally sealed	
Compact: antenna section 250mm long by 100mm diameter; mounting tub 300 mm long by 29 mm diameter	
Weight: 1.34kg	Feeder connection: N-type
Bandwidth: 600MHz-1200MHz	Power handling: 500W

Remote control unit	Transponder
Weight under 1.5kg	Flexible, software-configured interface allows retrofit and new installations
Dimensions 133mm x 146mm x 76.2mm deep	Supports Modes 1, 2, 3/A, C, 4 and mode 5 growth
Scrollable menu display supports all current Mark XII, Mode S Level 3 and TCAS operational requirements	Supports Mode S Level 3 and interface to TCAS II system
Includes provisions for growth to Mode S Level 4, Mode 5 Levels I and II, and MCAS/E-TCAS	Dual crypto interface supports external or embedded crypto DoD AIMS 97-1000 and STANAG 4193 compliant
Illuminated by "pure green" LED technology compatible with radiance and chromaticity requirements of generation III Direct View NVIS	MIDS/JTIDS compatible
Operates from 28V DC at less than 15W	Selected by US Navy/Army for next-generation Common Transponder
RS-485 half-duplex interface to transponder permits RCU software reprogramming	Weight: 9.8 pounds
Day/night/NVIS capable: automatic luminance presets indicators and alphanumeric display Direct CXP control from front panel keypad and controls	Power: 28V DC in accordance with MIL-STD-704 typically less than 30W, 50W maximum
View/modify controls and status	Reliability: >4,800 hours predicted MTBF in airborne uninhabited platform
Tactile feedback on all switches and keys	Maintainability
Recessed keypad reduces likelihood of inadvertent entries	Front panel BIT activation and WRA status indicator for rapid verification of operational readiness
Auto-configuration recovery after power interruption	SRA fault indicators for rapid SRA fault detection and isolation

