Hawk IFF™
Exceptional Range.
All Mode Capability.
All mode capability. One device.

Overview

The Hawk IFF is a radar-based identification system designed for Command and Control (C2). Like any full-size IFF, it uses a transponder that listens for an interrogation signal, then sends a response that identifies the broadcaster. This technology enables military and civilian air traffic control interrogation systems to identify aircraft, vehicles or forces as friendly and to determine their bearing and range from the interrogator. Both military and civilian aircraft use IFF.

The new Hawk IFF delivers all the performance of traditional IFF transponders in a fraction of the space. Small enough to fit in your hand and weighing less than eight ounces, it can fly on Class II UAS and up. Its small size frees up valuable space for other critical equipment.

Hawk IFF supports all applicable military and civilian IFF modes and has been developed by the Ultra Specialist RF team with decades of mission-critical RF systems experience.

Features & Benefits

All modes. One device.
All Military and Civilian IFF modes, including 1, 2, 3/A, C, S, ES, 5* and ADS-B IN/OUT

High Power for Extended Range.
The Hawk IFF supports up to 500 watts of transmit power.

Only 7.6 Ounces
The Hawk IFF’s small size means it can be located almost anywhere on the airborne platform.

Antenna Diversity
Two antennas provide 360-degree coverage in cases where physical obstructions could cause shadowing.

Military Grade
Designed for operation in the harshest environments, from -40C to +70C.

Technical Specifications

<table>
<thead>
<tr>
<th>Physical</th>
<th>Transponder</th>
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<tbody>
<tr>
<td>Dimensions 3.3 in x 2.7 in x 0.8 in</td>
<td>Frequency 978, 1030, 1090 MHz</td>
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<tr>
<td>Weight 7.6 oz.</td>
<td>Functions Modes 1, 2, 3/A, C, S, 5*, ADS-B IN/OUT</td>
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<td>Power 10-36 VDC; approx. 20W @ 28VDC (1% duty cycle)</td>
<td>Transmit Power &gt; 500W (1% duty cycle)</td>
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<td></td>
<td>Receiver Sensitivity -76 dB</td>
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<td>Antenna Diversity 2 antennas</td>
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<td>Designed to DoD AIMS 03-1000C Specification</td>
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* Some modes require additional hardware and/or USG approval.
Identification Friend or Foe (IFF)
Mission-Critical Capability for Any Airborne Platform

20x reduction in size and weight

Ultra designed the Hawk IFF for deployment in both current and next generation platforms. This miniaturization reflects the trend toward ever-smaller UAS and extends to traditional fixed and rotary wing aircraft. We’ve reduced the SWaP 20x to fit into the design of any airborne chassis, with a weight of 7.6 ounces.
Ultra Pedigree

Ultra is a trusted partner with decades of experience in providing mission-critical RF capabilities for telemetry, range safety, electronic warfare and radar applications.

Specialist RF Offerings

- **RF Microwave Assemblies**
  Custom radio frequency products enabling high performance detection and engagement in electronic warfare and radar system applications.

- **Tactical RF Products**
  Tactical identification and navigation/guidance capabilities compatible with low SWAP-C applications in rugged environments.

- **Electronic Warfare Test Systems**
  Test Systems for laboratory and range applications. Highly specialised in market-leading, multi-spectral threat and countermeasure simulators.

- **Flight Instrumentation**
  Range safety and telemetry products to support missile and unmanned vehicle/target testing and training missions.

Ultra Specialist RF Technology is implemented on many platforms.

Ultra Specialist RF has designed, developed and deployed RF assemblies for multiple generations of fixed-wing, rotary-wing, UAS, rockets and missile platforms - many of which are still in service today.

Learn more about Ultra’s Specialist RF Solutions at sales@ultra-us-gbs.com or ultra.group/intelligence-communications