FLYINGFISH™ IS A PROVEN SOLUTION FOR COAST GUARD AND SAR MISSIONS.

NSN: 5895-99-373-0913
Horizon Technologies has developed FlyingFish™(M) to allow government customers to locate Satellite and GSM (optional) phones at sea. FlyingFish™(M) is a development of our successful standard FlyingFish™ SIGINT system used by governments worldwide. FlyingFish™ is a UK COTS product and is non-ITAR.

Based on customer input from hundreds of hours of recent patrol over the Mediterranean Sea, FlyingFish™(M) has been designed to locate Sat Phone (GPS location), and GSM phones (optional) at sea. The main advantage of FlyingFish™ as an airborne system is an increase in detection ranges > 400 km or 250 nm (altitude dependent) of the satellite phone uplink due to better line of sight.

The FlyingFish™ operator is able to toggle between the appropriate software and appropriate antennae for either Thuraya, or IsatPhone-Pro networks. Monitoring of the two networks simultaneously is possible, but requires our new FlyingFish (S) unit.

In addition, we now offer an AIS/GPS module for those aircraft not having this capability. Correlating AIS tracks with phone handsets, is a key component to maritime domain awareness, and Search and Rescue (SAR).

Horizon is proud to offer a full package to address this important market.
FlyingFish™(M) customers can provide their own COTS downlink and uplink antennae. Horizon Technologies can also advise on appropriate specifications, and also can provide the complete system kits.

**Thuraya and IsatPhone-Pro monitoring**
The GPS location of all activity is recorded and its position can be displayed on an interactive map within the Graphical User Interface (GUI). This mapping functionality is based on the industry standard ArcGIS software produced by ESRI. Maps with finer detail and even satellite images can be incorporated into the interface. The GPS accuracy is approximately 6m.

**Optional GSM Module**
The FlyingFish™(M) GSM Module has been designed to accurately locate GSM (2G) and UMTS (3G) mobile telephones in the challenging airborne SAR environment. The system is designed to maximize the ability to detect a phone at extended ranges and to provide unique capabilities while minimizing crew workload. The GSM module uses a Software Defined Radio and GSM/UMTS protocol stack designed, developed, and optimized for the SAR role. Our auto triangulation algorithm achieves impressive accuracy compared to the inherent resolution offered by the protocol itself. Audio and Text communication is also possible (when the unit goes into an active mode). Flight tests have successfully located and communicated with phones at ranges in excess of 35km.

**Optional AIS/GPS Module**
Our Secure Airborne Automatic Identification System (AIS) Receiver provides maritime patrol and Search and Rescue (SAR) aircraft with the ability to track and identify AIS-equipped vessels over a dedicated VHF data link. AIS is a key component of any maritime Intelligence, Surveillance, Reconnaissance (ISR) network and offers maritime authorities the ability to better coordinate air and sea search and rescue, surveillance and interdiction operations. Our system is fully compliant with the W-AIS protocol standard for secure AIS communications and offers an FIPS-approved encryption method for decoding of secure position reports and messages.

Complete specifications of our GSM and AIS/GPS modules are available upon request.
Technical Specifications:

Part Number: FF3-S-LW20-793193

System Capability:
- Analyzes Thuraya, Inmarsat/IsatPhone Pro traffic
- 32 Duplex Channels
- Single sealed unit with internal cooling
- Software control of all Front Panel functions
- DC Input: 10V - 36V
- Omni-directional interception
- All software protected by licensed dongle
- Remote control optional
- System Erase function
- No shock mounting required

System components:
FlyingFish™ unit including
- Downlink antenna (1524 - 1560 MHz)
- Target antenna (1626.5 - 1660 MHz)
- Thuraya: LHCP/Inmarsat/IsatPhone Pro: RHCP

Airborne Configuration Includes:
FlyingFish™ unit including
- 1x Dual Integrated Downlink Filter/LNA
- 1x Dual Integrated Uplink Filter/LNA
- 2x Dual mode Antenna (Optional)
- Mouse, keyboard, set of cables, and connectors
- Ruggedized display with USB Hub

FlyingFish™ Dimensions:
W398mm | D411mm | H178mm
Weight: 10Kg

Power requirements:
AC PSU EXTERNAL: 90V-264VAC, 47/63Hz O/P 700W at 28V
DC PSU INTERNAL: 28V, 350W; MIL STD 461F Section 16 (Voltage Spike)
MIL STD 461 Section 21.5 (Emission)

Environmental standards:
Mil-Std-461F (EMC)
DO-160G (Vibration)
Altitude: 30,000 ft.
Operating Temperature: -20C +50C
Storage: -55C – 85C
Color: 60% Matte Black
Mounting: 4 x M5 mounting holes
Interfaces: Comms port, 2 x Ethernet, System connection
(4 x USB, HDMI and VGA)

NOTE: FlyingFish™ is subject to EU Dual-Use export control under section 5A001.1 of the EU Dual-Use control list.
An export license is required for shipment outside the EU.
All specifications subject to change without notice.

UK Office:
30 Percy Street, London W1T 2DB, United Kingdom
Registered in England, Wales, and US: 03886131
www.HorizonTechnologies.eu

USA Office:
1101 Connecticut Avenue, NW, Suite 450
Washington, DC 20036
www.HorizonTechnologies.com