

# Connectivity for Unmanned Air Vehicles

AVIATOR UAV 200, a revolutionary new solution from Cobham, redefines UAV satcom connectivity by integrating everything into one compact, lightweight box.

Weighing just 1.45kg, AVIATOR UAV 200 is a remarkable 76% lighter than anything comparable on the market - yet still delivers Inmarsat Class 4 services, up to 200kbps data and near real time control of data channels. Real time surveillance just got lighter!

Tactical UAVs depend upon lightweight components to maximise range, endurance and operational use. However, until now, the size, weight and power requirements of Inmarsat satcom hardware made it impossible to take advantage of the higher speed connectivity from today's satellite networks on smaller UAVs.

Weight and size-optimised for small tactical UAVs





#### **Features**

## KEY BENEFITS

- Beyond Visual Line Of Sight (BVLOS) communications
- Real time control of aircraft over satcom
- Real time navigation with telemetry over satcom
- Real time health monitoring
- View near live video & imagery
- Dynamic aircraft re-routing

#### FEATURES

- Weight: 1.45kg (nearest model: 6.1kg)
- Power: 28W (nearest model: 73W)
- Size: 1 box solution (nearest model: 3 boxes plus cables)
- Sufficient bandwidth for flight control over full aircraft range and endurance
- Payload flexibility (due to size, weight and power savings)

# Specification

### SPECIFICATION

- Single Line Replaceable Unit solution
- Mounted within the airframe
- Class 4 SwiftBroadband offering full Inmarsat hemisphere coverage to 5° elevation
- Background data service up to 200kbps
- Streaming class services up to 180kbps with half HDR
- User class context control
- System BITE

## INTERFACES TO AIRCRAFT

- DC Power (14 28VDC)
- Nav in via RS-232 or Ethernet

#### USER INTERFACES

- 2 x Ethernet
- 2 x RS-232

#### MECHANICAL OVERVIEW

- Single box solution
- Weight 1.45kg
- Dimensions: 24 x 16 x 6cm
- Mid-flange for ground plane and heat management
- Micro-D connector interface
- Protected user-accessible USIM

# The world's smallest, lightest Inmarsat UAV solution





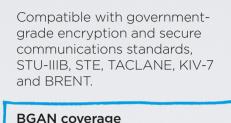
#### Reliable

Inmarsat's networks are renowned for their reliability with proven availability above 99.95%.



#### Global

SwiftBroadband is available globally except for extreme Polar regions.



**Secure** 

The AVIATOR UAV 200 connects back to base via Inmarsat's SwiftBroadband service, providing a reliable command and control communications link beyond line of sight, as well as a real time feed from on-board payload sensors, via a single channel 'always-on' data service up to 200kbps. Streaming class services are also available.



Extended range and endurance

# **Benefits**



#### **Beyond line of sight**

For true surveillance and monitoring, it is vital that operators get near real time visual feedback of the video captured.

Previously, tactical UAVs had limited connectivity, meaning that all viewing and decision-making had to be within line of sight or after the airframe returned, by which time the data will often have lost its tactical or commercial value.



#### **Enhanced aircraft control**

With AVIATOR UAV 200, operators can now send flight commands to the UAV in real time. By making immediate route adjustments as and when necessary, not only does this significantly enhance mission flexibility but it can help to protect the UAV and other airspace users should it need to avoid potential threats or return to base.



#### Greater payload flexibility

A tactical UAV's combined weight has a large impact on its endurance and operational flexibility. By providing a satcom solution that is smaller and lighter than anything bandwidth-comparable on the market, AVIATOR UAV 200 not only improves the UAV's range but significantly expands its payload capability and thereby its commerical and strategic value.

Receive time-critical data in near real time

Ask your supplier about Cobham AVIATOR products, email satcom.aviator@cobham.com or visit www.cobham.com/UAV200