




IMS-350 Iridium Certus® Integrated Mission System and Broadband Satcom for Unmanned Aircraft

 Value-Added Partner to Iridium®

UP TO 352 kbps UPLINK	UP TO 704 kbps DOWNLINK
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Broadband Satcom, Cellular, Wi-Fi, and Integrated Server for Mission Critical Flight Operations

SKYTRAC's innovative IMS-350 UAV Satcom system provides cutting edge capabilities, broadband connectivity, and limitless applications in a daringly small form factor. The IMS-350 is SKYTRAC's flagship answer for UAV Satcom capabilities, providing both data link and custom onboard server capabilities for industries looking for reliable, robust, and proven global communications. Enhance your UAS with Wi-Fi, Cellular, and Satcom connectivity.

The onboard quad-core server supports sensor-matched applications that can parse collected data to determine what to transmit in real-time. The integrated smart router polices data traffic by prioritizing data throughput, ensuring efficient use of Satcom and cellular channels.

Harness the true pole-to-pole connectivity of Iridium Certus broadband with up to 352 kbps uplink and up to 704 kbps downlink.

Key Capabilities Include:

- Beyond Visual Line of Sight (BVLOS) Comms.
- Real-Time UAS Command and Control (C2)
- UAS and Payload Health Monitoring
- Real-Time Flight Data Monitoring (FDM)
- Video Streaming and Data Transmission
- Sensor Fusion and AI Support
- Global Network-based Remote ID
- Onboard Server with Virtual Machine
- Custom Application Hosting

Discover SKYTRAC
Over its 35 year history, SKYTRAC has become the partner of choice for data-guided business insights. As an Iridium Aviation Partner, SKYTRAC is well-positioned to leverage Iridium Certus broadband to provide operators with leading capabilities.



SKYTRAC is part of the ACR Group of companies.

IMS-350 DATA SHEET

GLOBAL UAS DATALINK AND ONBOARD SERVER



PRODUCT SPECIFICATIONS

IRIDIUM SERVICES

Iridium Certus

OPERATING FREQUENCY

1616 MHz to 1626.5 MHz

POWER CONSUMPTION

Customizable for a range of platforms

STORAGE CAPACITY

Customizable for a range of platforms

OPERATING TEMPERATURE

-4°F to 131°F (-20°C to +55°C)

SHORT TERM OPERATING TEMPERATURE

-40°F to 158°F (-40°C to +70°C)

DIMENSIONS

H x W x D = 2.50" x 5.74" x 7.28"
(6.4 x 14.6 x 18.5 cm)

WEIGHT

3.00 lbs (1.36 kg)

INTERFACES

- Cellular and Wi-Fi Connectivity
- GPS/GNSS
- 2x Ethernet Interfaces
- Multiple ARINC 429 Tx/Rx
- Multiple RS-232
- Multiple RS-485
- 4x Discreet I/O
- CAN Bus

PRODUCT HIGHLIGHTS

- Beyond Visual Line of Sight (BVLOS) Communications
- Real-Time Aircraft Command and Control (C2)
- UAS and Payload Health Monitoring
- Real-Time Flight Data Monitoring (FDM)
- Video Streaming and Data Transmission
- Global Network-Based Remote ID
- Onboard Server with Virtual Machine
- Sensor Fusion and Artificial Intelligence Support

Specifications subject to change. Contact sales@skytrac.ca for latest revision.



Applications: Beyond Visual Line of Sight Communications



Applications: Artificial Intelligence and Sensor Fusion

35 YEARS OF SATELLITE COMMUNICATIONS EXPERTISE

Satcom Expertise	35 Years
SKYTRAC Users	7,500+ Users
Systems Certified	900+ Airframes
Global Clientele	100+ Countries

SKYTRAC's UAS Satcom solutions utilize the world's only truly global satellite network, providing operators with low-latency broadband connectivity no matter the location. This reliability allows mission-critical operations for UAS through Iridium Certus, providing immense cost saving benefits over comparable GEO satellite networks. Gain leading-edge, high throughout Satcom with the capability to host applications directly through the built-in onboard server.

SKYTRAC has over 7,500 users around the globe on all seven continents and ensures long-term support to all customers and partners. Our AS9100D designation ensures leading global brands can trust our systems to perform reliably. In addition, we have cultivated strong partnerships with major OEMs across the globe, proving advanced capabilities and integrability.

Don't see what you're looking for? To learn about custom application development, contact sales@skytrac.ca

INDUSTRY SEGMENTS

The #1 Option for Global L-Band SATCOM

SKYTRAC serves the largest organizations in multiple industry verticals. With 7,500+ global users on all seven continents, we ensure our products and services are highly reliable and are trusted by those that rely on us for mission-critical applications.





Endless UAS Applications:

- Aerial Firefighting
- Aerial Survey
- Cargo Delivery
- Disaster Relief
- Law Enforcement
- Government and Military
- Scientific Exploration & Research
- Search and Rescue

Need a custom UAS Satcom solution? To learn more about Satcom integration, contact sales@skytrac.ca

IRIDIUM CERTUS ANTENNAS

SKYTRAC-designed antennas offer a variety of data rates, interfaces, and dimensions, based on your UAS operations profile.

Antenna Class	Description	Data Rates	Interface	Dimensions	Weight
Passive LGA 	Iridium Certus Puck Antenna	176 kbps (Bi-directional)	Single Coax <2 meters	3.5" diameter (8.89 cm)	141 g (5 oz.)
Passive LGA 	Dual Element Iridium Certus/GPS Antenna	176 kbps (Bi-directional)	Single Coax <2 meters	5.00" x 2.20" x 0.72" (19.94 cm x 7.62 cm x 4.95 cm)	240 g (8.5 oz.)
Active LGA 	Active Low Gain Antenna	176 kbps (Bi-directional)	Single Coax <10 meters	7.85" x 3.00" x 1.95" (12.7 cm x 5.59 cm x 1.83 cm)	1.36 kg (3.00 lbs.)
High Gain Antenna 	Phased Array, High-Gain Antenna	352/704 kbps Tx/Rx	Single Coax <10 meters	9.10" x 4.34" x 2.25" (23.10 cm x 11.02 cm x 5.72 cm)	1.80 kg (4.00 lbs.)

For more information, contact a connectivity expert at sales@skytrac.ca