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

iridium connected

UP TO	UP TO
176 kbps	**176** kbps
UPLINK	DOWNLINK

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.

Key Capabilities Include:

- Certus 200 Services
- Dual-4G LTE + single-5G cellular configuration
- Wi-Fi Connectivity
- Dynamic link management
- Quality of Service (QoS)
- Linux OS, virtual machine, & docker support
- Video compression software
- Remote ID
- Support for dual-VHF radios

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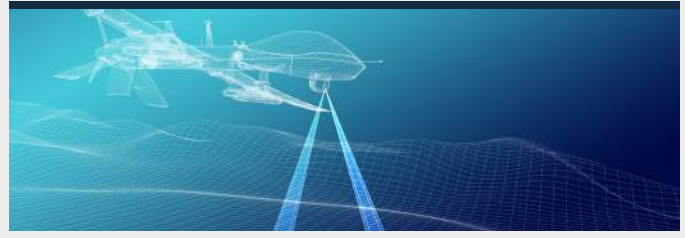
Discover SKYTRAC
Over its 35 year history, SKYTRAC has become the partner of choice for data-guided business insights. As an Iridium Aviation Partner, SKYTRAC is well-positioned to leverage Iridium Certus broadband to provide operators with leading capabilities.

SKYTRAC

Applications: Beyond Visual Line of Sight Communications

Applications: Artificial Intelligence and Sensor Fusion

35 YEARS OF SATELLITE COMMUNICATIONS EXPERTISE

Satcom Expertise	35 Years
SKYTRAC Customers	800+ Customers
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
Iridium/GPS Low Gain		Aviation Combo Iridium Omni and GPS Antennas	Iridium Block 1 2.4 kbps (Bi-Directional)	TNC Female Single Coax	5.0" x 2.2" x 0.7" (19.9 cm x 7.6 cm x 5.0 cm)	240 g (8.5 oz.)
Certus 350 Active High Gain		Aviation Steered Beam Antenna (TSO)	Certus 350 352 Kbps Transmit 704 Kbps Receive	TNC Female Single Coax	9.1" x 4.3" x 2.3" (23.1 cm x 11.0 cm x 5.7 cm)	2.3 kg (5.1 lbs.)
Certus 200 Active Low Gain		Aviation Powered Omni Antenna	Certus 200 176 kbps (Bi-Directional)	TNC Female Single Coax	7.9" x 3.0" x 2.0" (19.6 cm x 7.6 cm x 5.0 cm)	1.4 kg (3.1 lbs.)* *These dimensions and weight are notional and TBD

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

SKYTRAC

IMS-350 DATA SHEET
GLOBAL UAS DATALINK AND ONBOARD SERVER

Compact, rugged enclosure for easy integration into UAS platforms

Onboard server capable of hosting and supporting a multitude of mission-critical applications including AI and sensor fusion technologies

Multiple flexible digital/discreet inputs supporting ARINC-429, RS-232, Ethernet compatibility, and more

SKYTRAC
www.skytrac.ca

Customizable power, storage options to support a range of UAS platforms

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

- Transmits and receives at 176 Kbps on the Iridium Certus network
- Enables Wi-Fi and cellular connectivity for various connectivity options
- Offers dual-4G LTE and single-5G cellular configuration
- Has dynamic link management to ensure reliability
- Quality of Service (QoS)
- Linux OS, virtual machine, & docker support
- Functionality for edge computing, video compression, and radio over IP (RoIP)
- Remote ID capabilities to esnure safety and security when completing complex operations
- RoIP supports dual-VHF radios

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