

Honeywell



Sky Connect™ Tracking System

Manage your fleet with a complete Iridium® satellite tracking and communications solution

A complete system that helps you manage your fleet.

The single best way to maximize safety and efficiency for demanding missions is with a complete system that helps you actively manage your fleet.

Sky Connect™ Tracking System is the industry's only complete tracking and communications solution with features and benefits you won't find anywhere else.



Text and Talk

Designed for crews with a busy workload, the Sky Connect system easily accommodates any operational scenario with its talk and text capabilities.

Sky Connect text messaging provides the easiest and quickest way for pilots and dispatchers to communicate simple messages to one another.

The prestored messages with data fields and full telephone keypad make text messaging with the MMU-II™ an excellent way to communicate up-to-date, accurate information.

Messages sent to the aircraft by the dispatcher are displayed immediately and all messages received during the flight can be recalled.

When equipped with the MMU-II, the Sky Connect system can also include a voice telephone.

The system provides a headset-level interface tied into the aircraft audio panel and supports over 500 prestored phone numbers with names for easy use.

Total Situational Awareness

Sky Connect Tracking System enables any equipped aircraft in the world to be tracked in real time via the Iridium satellite network.

The lightweight transceiver LRU sends encrypted GPS-based position reports at automated intervals to authorized control centers using secure data protocols.

The Sky Connect Map web-based software displays the aircraft location, GPS flight plan, crew status and weather overlays on topographical maps for full situational awareness.

Text messages from the aircraft are displayed on the mapping screen so dispatchers can stay organized and fleets can be managed effectively.

For integrated operations, Sky Connect offers a versatile architecture of interfaces and inputs that work with any aircraft situational display software.

System Functionality

In addition to the basic Iridium® functions (voice/tracking/messaging), Tracker III incorporates the following capabilities:

- Shared antenna signaling for GPS and Iridium
- Integrated dual ARINC429 interfaces
- Web browser-based installation configuration
- POTS and 4-wire audio versions
- Over-the-air configuration
- Internal recording of high-res path data for post-flight review
- Transmission of high-res position data (TrueMiles™)
- Ability to send last position/power-down report after power loss (LPV PowerBank)
- Operation in extreme environments down to -55°C

Key Features

- *Tracking* – worldwide near real-time tracking of aircraft status, 3D location, flight route, ETA
- *Text* – worldwide two-way text messaging
- *Voice* – worldwide always-available voice telephone service
- *Dual Voice* – two separate voice telephone channels – one for the flight crew, one for the cabin
- *Dual Mode* – simultaneous tracking and voice services, with uninterrupted continual provision of both services

Next-generation mission management.

Sky Connect Tracker III, the heart of the aircraft operator's mission management system, is the newest member of the Sky Connect Tracker family. This feature-rich, next-generation successor boasts exciting new capabilities and a built-in path for future upgrades.

Easily installed on any aircraft platform, Tracker III is ideal for current Sky Connect Tracker customers, those using other systems, or anyone seeking a superior mission management system. Tracker III is the new technology core of the proven and trusted Sky Connect family, ensuring excellence in reliability, service and support.

Small and Powerful

Compact systems have always been a key benefit of Sky Connect Tracker products. New technology has made it possible to increase the Tracker III's communications capabilities while also integrating the previously separate ARINC 429 converter unit. In fact, the new line replaceable unit (LRU) will fit existing installation trays, simplifying upgrades to the Tracker III for existing Sky Connect customers.

The Tracker III is an enhancement of its robust predecessor, providing significantly more capability within virtually the same form factor:

- Simultaneous tracking and voice capabilities allow vital tracking and urgent text messages to occur even during lengthy voice calls.
- A new capability called Last Position Vector (LPV) PowerBank enables the helicopter to send final position reports after the pilot powers down the aircraft or if any incident interrupts aircraft power.
- Installation is quick and easy with little disruption to operations. The new LRU fits the existing tray and wiring with minimal or no changes.
- A new OLED multipurpose display replaces LED status lights and enables simplified installation, configuration, status monitoring and troubleshooting.
- Provides FDM compliance for FAA rule 135.607 for HEMS operators.

The Tracker III also incorporates a Flight Data Monitoring function. It provides a means of collecting data from on-board systems through various interfaces to record and communicate aircraft performance and potential maintenance needs. User-configurable alerts can be generated based on threshold exceedance. Alert messages are communicated to the ground operations center using the Iridium satellite network.

Key Features

- Can be configured to capture parameters such as including: air speed, attitude, fuel flow, torque, temperature, oil pressure
- Ability to capture an additional 70 recorded parameters
- Easily downloaded data provides for quick analysis and maintenance decision making
- Reliable, globally-available Iridium satellite mission management system
- Concurrent talk, text and tracking in a single dual channel box
- Real time, secure, position reporting and event alerting for true fleet situational awareness



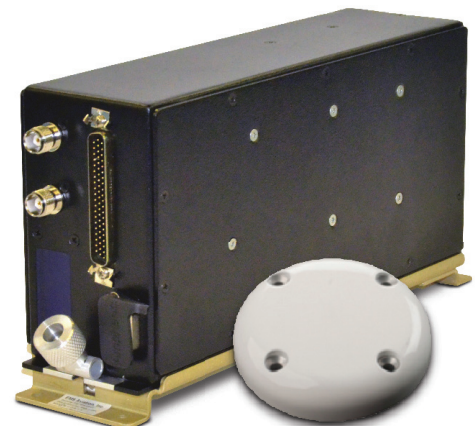
Sky Connect Tracker III can be integrated with Onboard Health and Usage Monitoring System (HUMS)

Key Features

- Reliable, globally-available Iridium satellite mission management system
- Concurrent Talk, text or tracking in a single box
- Encrypted GPS position reports for fleet tracking
- HUMS and vibration analysis enables maintenance based on condition
- Provides real time vibration exceedance alerts to ground crews
- Post flight web service support for flight data monitoring, fleet health trending and diagnostics

Benefits

- Optimize your mission – Real time messaging, integrated flight planning, routing efficiency
- Prepare for repairs before you land – Reduced downtime and faster return to service
- Single billing for all services simplifies support
- Increased safety – proactive identification of faults or failures to prevent accidents
- Reduce maintenance cost via HUMS – fewer spares and test flights, faster diagnosis



SKY CONNECT TRACKER SYSTEM	
MMU-II™	
Display:	Dimmable 2-line, 32-character alphanumeric
Keypad:	Backlit elastomeric keys
Controller:	Push/turn multifunction mode controller
Memory:	High capacity directory with name and number
Option:	Integrated text messaging
Mount:	DZUS-rail
Physical:	5.7 x 1.9 x 5.0 in.
Weight:	0.8 lb. (0.3kg)
Depth Behind Panel:	6.5in. (16.5cm)
Backlight Keypad:	Standard dialing with in-call DTMF and text input
Programmed Dialing:	500 16-digit phone numbers with 16-char name
Programmable Text Modes:	200 customized and grouped messages
Power:	10-32 VDC @ 100ma max
Connectors:	DB-25 male (2)
Tactical Dialer	
Display:	Dimmable LEDs and backlighting
Toggles:	Pull-to-throw
Physical:	5.75 x 1.4 x 1.75 / 0.3 lb.
Aviation Transceiver	
Compliance:	DO-160D;STC (various)
Power:	12-32 VDC
Physical:	10.25 x 4.8 x 2.9 in. / 4.32 lb. Tray: 10.75 x 2.9 x 0.75 in.
Single Iridium® Antenna	
Compliance:	TSO C-144, DO-160D
Physical:	5.0 x 2.2 x 0.75 in. / 0.6 lb.
Dual Iridium® Antenna	
Compliance:	TSO C-144, DO-160D
Physical:	5.0 x 2.2 x 0.75 in. / 0.6 lb.

To Find Out More

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SKY CONNECT TRACKER SYSTEM III	
Product Specifications	
ITEM	SPEC
Basic Transceiver Specs:	Dual Channel (Voice, Tracking, and Messaging)
Regulatory Compliance:	DO160F (Including +55000 Alt, +85/-55 Temp)
Weight:	4.4 lbs. Max. (Modem dependent)
Length / Width / Height:	10.25 Inches L / 2.9 Inches W / 4.8 Inches H
Power Requirements:	12-32VDC, 2.5 Amp @ 28VDC, 3.5 Amp @ 14VDC
Transmit Power Average:	1.5 watts per LBT
Mounting:	Quick release tray, 4-#8 holes, any configuration
Transmission rate:	2.4Kbps voice and data (10Kbps with compression)
Operating Frequency:	1.616-1.6265 GHz
Inputs/Outputs:	POTS (Plain Old Telephone Service) / 4 Wire Audio output 5 ea. RS232 Ports (Msgr, GPS/Aux, PC, Sim1/2) 2 ea. ARINC 429 Inputs, 1 ea ARINC 429 Output 8 ea. discrete inputs 0-36VDC. Sink 200ma Max. 4 Discrete outputs, Max Voltage, 36VDC, sink 200ma 1 ea. USB - PC Data connection 1 ea. Ethernet Port for configuration
Data Position	
GPS Data	Tracking source prioritization/redundancy allows simultaneous use of 3 separate GPS sources
GPS External ARINC429:	
Hi/Lo Speed	- Altitude, Lat/Lon, Track, Ground Speed, Cross track error, Desired Track - Distance to waypoint, Bearing to waypoint, magnetic variation - Flight Plan data
Recording Rate	User configurable
GPS External RS232:	
9600 Baud	Garmin, Honeywell, Trimble and other standard ADF formats
4800 Baud	NMEA
Recording Rate	User configurable
GPS Internal:	
NMEA Messages	GSV, RMC, GSA, GGA, GLL, VTG, TXT
Recording Rate	User configurable
Flight Data Monitoring	
SD Storage	4GB accessible via the Ethernet Port
Recording Time	Varies with user selected params and rates, minimum ~350hrs
Temperature Monitors	4 with user selectable Over the air alert thresholds
Capacitive Keep Alive Circuit	Provides an additional minute of operation post power loss
Recorded Autonomous Events	Discrete Input activity, Call Logs, Signal Strength
Dual ARINC429 Inputs:	
User Selectable Recordable Labels	64
Additional GPS Labels Recorded	23
User selectable Sampling Rates	100ms-60s
OTA Alert Labels and sampling groups	4
Accelerometer:	
3 Axis	Orientation at user discretion
Recording Rate	User configurable
OTA Alert	User configurable thresholds