RockAIR

Portable, globally connected tracking, IoT and messaging device for Aviation

Designed for use on the dashboard of a light aircraft, RockAIR is a portable satellite-enabled tracking device. Quick access to alert features using the front panel along with a comprehensive set of tracking, messaging and M2M/IoT functionality, ensures data or message transfer from anywhere across the globe. Its dual mode least-cost routing option allows cellular connectivity when possible, switching to Iridium Satellite when it's not available. The unit comes with a quick release mount to enable carry-on installation in seconds.

Key Features

- 100% global coverage, delivering accurate GPS locations
- Real-time tracking in all weathers
- Bluetooth LE-enabled two-way messaging

Physical & Environmental

Size	100mm x 119mm x 25mm
Weight	210g (8oz)
Iridium Transceiver	9603 Modem
Patch Antenna x 2	GPS/GLONASS/Galileo Patch Antenna & MISC-IRIANT1629- Tuned Iridium Patch Antenna
Form Factor	Small, light, portable, dash mounted device, suitable for inside of Aircraft or Rotorcraft, with multiple mounting options. Can be covertly mounted and positioned
Certifications	CE, IC, FCC, DO160 RTCA Aircraft compliant

Electrical Power

The RockAIR is designed to be attached to mains power for most of the time

Power Input/Output	Powered by DC input, USB or integrated backup battery
Voltage Required	DC 9-30V
Backup Battery	Li-ion polymer battery back-up - 8 hours if set to make 1 transmission to Iridium per minute

Features

Iridium SBD Connectivity	Full two way communication from anywhere in the world
With GSM Option	RockAIR uses GSM networks when available, switches to Iridium only when necessary. Set up tracking profiles for: different position tracking rates, geo-fence proximity, and changes in behaviour (eg if external power is lost, or if the device is moving)

Related Products

RockDASH	The RockDASH is a portable, dash-mounted, vehicle tracking and messaging device used to monitor GPS location and vehicle movement
RockBLOCK 9603	The smallest and lightest version in the RockBLOCK family. Unencapsulated, powered via USB or direct-header connection

Communications

Cellular Network Options	LTE-M, NB-IoT, 2G
GPS	Location tracking cadence is customisable - as quick as 15 seconds over cellular, up to every 24 hours. Alternative tracking profiles can be set up to suit your usage patterns
Iridium	Low latency, Short Burst Data (SBD) - auto switch between cellular and Iridium data transfer keeping your costs down but your messaging and data flowing
Data Send	340 bytes per message
Data Receive	270 bytes per message
Send/Receive Frequency	Configurable from continuous up to 24hr or burst
Bluetooth LE	For advanced messaging; requires BLE compatible phone/tablet
Message delivery	Messages sent from RockAIR can either be delivered to chosen email address, or sent to own web service as a HTTP POST
Sending Data	HTTP POST made to GC's web service, it's queued on the satellite network, and almost instantly ready for RockAIR to download on command
Cloudloop	Manage and monitor your device and delivery network with our cloud-based platform, providing real-time data-driven insight

Inputs and Sensors

RS-232	RS-232 is accessible via the 4pin molex connector (DC power and serial connection)
External Switch Inputs	For easy alerting from external sensors
Integrated Sensors	GPS, accelerometer, thermometer, power loss and impact sensors

Supporting RockAIR

Mounting Options	The device has a quick release base clip as a mounting option
Cable	RockAIR comes with a 1m micro usb charging cable. It also has an optional 4 pin and 6 pin molex cable (molex to flying lead/bare ends), please request this at purchase
SMA Connectors	This option provides SMA connectors for external Iridium, GPS and cellular antenna. Please request at purchase
Developer Documentation	Use our support hub for set up and everything you need to get your project up and running. https://docs.rock7.com/docs/rockair-overview