Date: 01/04/2025

AGU-1 Aircraft Gateway Unit (231-2041-XX)

Specification Early Release - Details are subject to change prior to product launch
Product expected to be available for sale in early Q3, 2025

The AGU-1 is the latest product to be released from Airborne Mission systems, delivering on the level of quality that our customers have come to expect. It combines 4G LTE and Iridium SBD communications technologies in a complete aircraft gateway solution.

Aircraft Tracking & Communication Features

The base functionality of the AGU-1 is an aircraft tracking device. Leveraging the Iridium satellite and Cellular LTE communication networks, the AGU-1 provides 15 second Cellular and 1 Minute Iridium position reports.

Iridium Satellite Transceiver	**Cellular LTE Cat 1 Transceiver**	**GNSS Positioning Receiver**
Global satellite communications with the low latency Iridium Short Burst Data (SBD) technology.	Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage.	Concurrent reception of 3 GNSS Satellite systems: GPS, GLONASS, GALILEO and BeiDou

Event Reporting

Interfacing aircraft sensors to the AGU-1's discrete switch input pins provides additional event reports.

- Engine Start/Stop
- Take-off & Landing
- Hover Entry & Exit *(Detected based on airborne state and GPS ground speed)*

Airborne Mission Systems Pty Ltd
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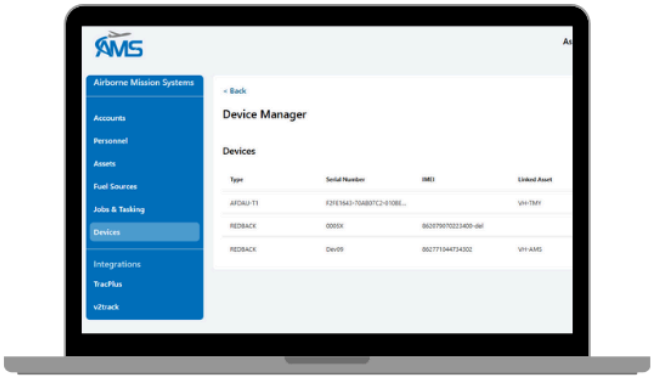
Hardware Features

Robust BNC and TNC Connections ensure a reliable coaxial connection to external antennas.

The proven design of the High Density D-Sub 26 Pin D-SUB connector provides the following interfaces:

- 9 - 30VDC Power inputs
- External Configuration Module
- 2x RS-232 Transceivers
- 1x ARINC 429 Receiver
- 1x CAN BUS Transciever
- 6x Digital Discrete Inputs (28VDC to HI-Z or GND to Hi-Z Configurable)
- 2x Digital Outputs (Emergency Indicator / Fail Status Indicator drive)
- WiFi/Bluetooth Transceiver

The device can be powered via USB-C for easy on-bench configuration and initial setup. The device will operate with basic tracking functionality on USB-C 5VDC power however peripherals on the main connector will be inoperative.



Cloud Connected

The AGU-1 is supported by a cloud management system, providing over-the-air services that include:

- Configuration
- Firmware
- Asset/Device provisioning

The cloud service is a hub and consolidates all transmitted data, ready to be routed to 3rd Party Integrated Services.

Trusted Integration Partners

At Airborne Mission Systems we pride ourselves on having great working relationships with the biggest names in aircraft tracking services and will continue to deliver new integrated software partners. The cloud management system provides tools to help connect to these partners. Currently our integration partners are:

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Specifications	
Power Input	9 to 30VDC; 12W Max consumption
Power Consumption	12W Max consumption (peak) 8W Typical
Interfaces	6x Discrete Inputs 2x Discrete Outputs 2x RS232 Ports ARINC 429 In CAN Bus
Unit Size	123.5mm Width x 94.5mm Depth x 25.3mm Height
Weight	0.3 kg
Mounting Type	4x 10-32 UNC Tapped mounting threads; 4x 8-32 holes in flanged base
Wireless Communications	WiFi Bluetooth (LE) Iridium Satellite (SBD) 4G LTE Cat 1 GNSS Receiver
Construction	Anodized Machined Aluminium enclosure
Operating Temperature	-45 to +70 degrees Celcius
Storage Temperature	-55 to +85 degrees Celcius
Operating Altitude	Up to 35,000 Feet
Environmental Qualification	**TBA**, Expect RTCA DO-160G
Compliance	**TBA**, Expect RCM, UKCA, CE, FCC

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