

PLANET 9523 UAV Terminal – Technical Specifications



Functional Description

PLANET 9523 UAV Terminal is a light equipment that enables mobile data communication on the ground, in the air, or at sea, using Iridium satellite constellation or cellular networks.

PLANET 9523 UAV Terminal acts as a universal mobile router equipment for Autonomous Systems connectivity, and for real-time Critical Mission data exchange. The terminal can route generic IP packets and supports remote platform management protocols such as MQTT or MAVLINK.

Embedded application software provides added value functions such as tracking, telemetry, messaging, weather data exchange and more. Hosted in the cloud, PLANET web user interface enables access to the service to any connected device such as tablet, laptop or desktop.

PLANET 9523 UAV Terminal operates over a wide range of input voltage (9.0-36VDC) and is interfaced with external processors through Ethernet, Serial or Wifi link (option). It has an extensive storage capacity (SD Card), and includes a GPS receiver for autonomous timing and location.

Features

- Iridium Certified Product (TC006)
- Fanless ARM Processor Board
- Linux OS
- Memory: 128GB (default)
- Operating Temperature: -25°C to +50°C
- No internal battery

Power requirements

- Power supply: 9.0 $\Rightarrow$ 36VDC
- Average Consumption: 700mA@12VDC
- Peak Consumption: 4.5A@12VDC/6A@9VDC

Mechanical Characteristics

- Non flammable ABS UL94V-0 Enclosure: 180 x 100 x 30 mm
- Weight: 260g

Connectivity & Sensing

- Iridium 9523N Modem
- Cellular Modem (option)
- Wifi Module (option)
- GPS receiver

Order Part Number : TE012

Order Information

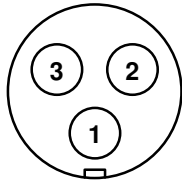
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Interfaces and Connectors

J1 – Power Connector

Connector: EGG.0B.303.CLL

Mating Socket: FGG.0B.303.CLAD52Z

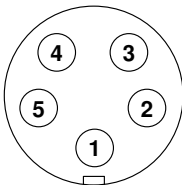


Pin No.	Signal Name	Signal Function
1	V+	9 – 36V
2	V-	0V
3	GND	Shield

J2 – Serial Link Connector

Connector: EGG.0B.305.CLL

Mating Socket: FGG.0B.305.CLAD52Z

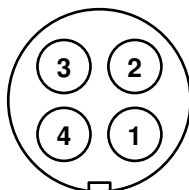


Pin No.	Signal Name	Signal Function
1	GND	0V
2	TX	Data to Modem (LVTTTL)
3	RX	Data from Modem (LVTTTL)
4	RTS	Request To Send (LVTTTL)
5	CTS	Clear To Send (LVTTTL)

J3 – Ethernet Connector

Connector: EGG.0B.304.CLL

Mating Socket: FGG.0B.304.CLAD52Z



Pin No.	Signal Name	Signal Function
1	RX+	Receive Data +
2	RX-	Receive Data -
3	TX+	Transmit Data +
4	TX-	Transmit Data -

J4 – GPS Connector (Optional)

SMA Female

J5 – Iridium External Antenna Connector

SMA Female.

Note: a maximum cable loss of 2.2dB at 1.6GHz is recommended. The antenna should be placed such that there is no physical obstruction below 8.2° of elevation.