



AVIONIC

TPZ-AIR100

TELESPAZIO GLOBAL SOLUTION FOR HIGH
AVAILABILITY BRLOS (BEYOND RADIO LINE
OF SIGHT) HYBRID COMMUNICATIONS ON
UAV AND LIGHT AIRCRAFTS

KEY FEATURES

- Hybrid communications: satellite and terrestrial (LTE, Wi-Fi, BT, LoRa)
- Iridium Certus 9770 Transceiver
- IP connectivity through Iridium Certus® 100 services
- Telespazio cloud infrastructure and user portal
- C2, telemetry and payload communications
- Accurate tracking (GNSS)
- API (Application Programming Interface) for 3rd party apps



TPZ-Air100 perfectly matches the service requirements for UAV and light airborne vehicles providing a flexible BRLOS capability at **low latency** able to forward on ground Telemetry, Command and Control (**C2**) and payload information.

The engineered design guarantees a high availability and reliable communication channel through the usage of the Iridium® satellite constellation and multiple terrestrial networks (LTE, LoRaWAN).

The TPZ-Air100 has also a dual frequency and multi constellation GNSS receiver to augment the position accuracy and provide advanced Geopositioning services.

The device has an embedded computer running a Linux-based operating system with generous computation and memory resources so that many applications and customer **applications software** can be effectively operated.

This feature enables TPZ-Air100 to provide **intelligent functions** like rule-based routing between different networks.

MAIN SPECIFICATIONS



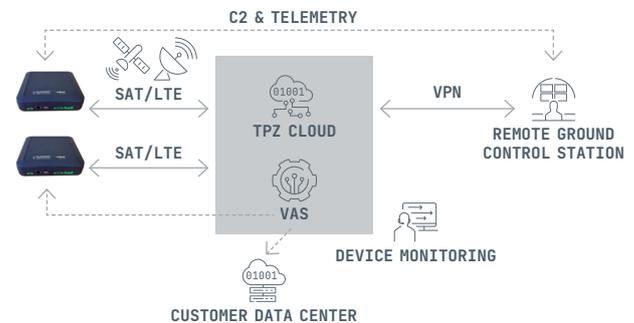
- Connection speed: 88 Kbps in download and 22 Kbps in upload
- IP20 case
- Iridium Certus 9770 transceiver
- 4G/LTE connectivity
- Wi-Fi 2.4/5.0 GHz; Bluetooth St. 5.0 2,4 GHz
- Wi-Fi HotSpot (via 4G/LTE)
- GNSS L1/L2 multi-constellation and double frequency receiver
- Single Board Computer with 16GB SD memory
- LoRa 868 MHz and 915 MHz
- IMU (Inertial Measurement Unit) 10 D.O.F. including accelerometer, gyroscope, compass and barometer
- Serial RS-232, Ethernet RJ45 connector, USB 3.0
- Weight: 950gr (cables and antenna excluded)
- Dimensions: 200x220x45 mm
- Power supply: 9-36 VDC
- Secure network infrastructure for customer data
- European RED and Iridium Certification

TELESPAZIO PRIVATE CLOUD FOR UAV & AIRCRAFTS

Telespazio also offers a digital platform, **TPZCloud**, that empowers the customer to exploit any information of telemetry or payload data coming from onboard through TPZ-AIR100 device to fully monitor, command and control the operational vehicles position tracking, data analysis, graph suite and much more!

The TPZ-Cloud functionalities are:

- Remote Management
- Automatic Provisioning
- Fleet Tracking and GNSS augmentation services
- Ultra-low bandwidth videostreaming
- Payload Data analysis and application dashboards
- APIs to publish data toward Customer Data Centers



- A true service enhancer
- Exploit your drone features
- Control your UAV from anywhere
- Analyze data in a safe cloud environment
- Use a self-developed app directly on your UAV



MULTIPURPOSE

TPZ-Base100



IoT

TPZ-IoT100



DRONES

TPZ-Air100



AVIONIC

TPZ-Avio100

TPZ-COMBOX FAMILY