AVIONIC

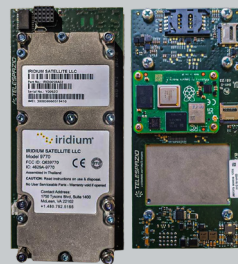# TPZ-BASE100

TELESPAZIO GLOBAL SOLUTION FOR BRLOS (BEYOND RADIO LINE OF SIGHT) SATELLITE COMMUNICATIONS ON MULTI-PURPOSE ENVIRONMENT

TELESPAZIO
a LEONARDO and THALES company

KEY FEATURES

- Compact form-factor PCB with 20-pin connectors
- Low SWaP (Size, Weight and Power) device specification
- Satellite channel through Iridium constellation
- IP connectivity based on Iridium Certus® 100 services
- Telespazio cloud infrastructure and user portal
- C2, telemetry and payload communications
- API (Application Programming Interface) for 3rd party apps

TPZ-Base100 perfectly matches the service requirements for multi-purpose environment (UAV, aircrafts, IoT, etc.) that require **low SWaP** components integration. It provides a robust bidirectional satellite communication channel using **IP protocol** from on board and on ground premises (e.g. Ground Control Station), entailing a flexible BRLOS capability service at **low latency**. Telemetries, Command and Control (C2) and payload information can be safely transmitted.

The engineered design guarantees a high availability and reliable communication channel through the usage of the Iridium® satellite constellation.
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-Base100 to provide **intelligent functions** like data fusion and onboard pre-processing.

EASY INTEGRATION ON MULTI-PURPOSE EMBEDDED SYSTEMS

TPZ-Base100 is a **compact PCB board device**, after being integrated and cabled onboard including the external satellite antenna on the fuselage, it is ready to work.
A 9-36 VDC power supply range is required.

The primary use of TPZ-Base100 is to exchange telemetry, commands and data directly from the aircraft to a remote station through Iridium constellation.
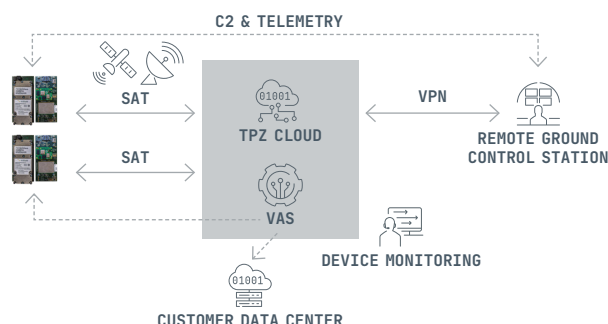
TPZ-Base100 strengths are the extremely reliable connectivity, the compact and lightweight PCB design and the possibility to use any customized app on the computing module opening the way to unlimited purposes.

Telespazio offers a digital platform, **TPZCloud**, that empowers the customer to exploit any feature of the aircraft: position tracking, data analysis, graph suite and much more!

MAIN SPECIFICATIONS

- Connection speed: 88 Kbps in download and 22 Kbps in upload
- Iridium Certus 9770 transceiver
- Single Board Computer with 16GB SD memory and 8GB RAM
- Serial RS-232, Ethernet RJ45, USB 3.0 (through the 20-pin connector on PCB)
- Weight: 280 gr (cables and antenna excluded)
- Dimensions: 160x75x25 mm
- Power supply: 9-36 VDC
- Secure network infrastructure for customer data
- European RED and Iridium Certification
- Optional enclosure/cases can be provided

- A true service enhancer
- Performance guarenteed with low SWaP device specification
- Access your aircraft from anywhere
- Analyze data in a safe cloud environment

MULTIPURPOSE	IoT	DRONES	AVIONIC
TPZ-Base100	TPZ-IoT100	TPZ-Air100	TPZ-Avio100

TPZ-COMBOX FAMILY

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