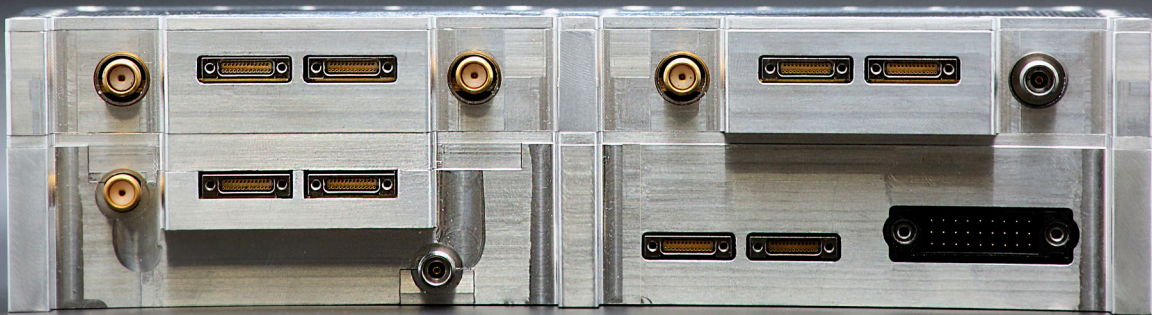


RADIOSAT[®]

KU-BAND TRANSPONDER



MINIATURIZED NON-REGENERATIVE TRANSPONDER
DESIGNED FOR CUBESAT AND SMALL SATELLITES
FOR LEO AND GEO APPLICATIONS.

OVERVIEW

Born as a customization of RADIOSAT, this transponder is a miniaturized non regenerative transponder designed for CubeSat and Small Satellites for LEO and GEO applications.

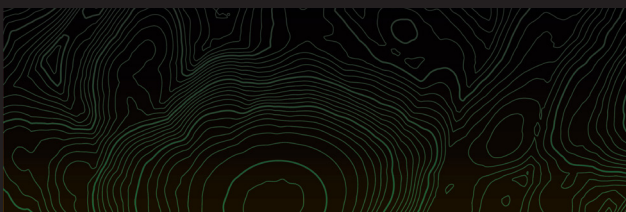
With a volume of 1 U and a mass of 1.2 kg, the transponder operates in Ku-band and it is characterized

by low power consumption.

The transponder allows two signal bandwidths, 400 kHz or 700 kHz.

The radio allows it to operate with the most common modulation schemes and offers a versatile beacon function.

Telemetry and Telecommand functions are available over the common standards.



APPLICATIONS

- LEO small satellite services
- GEO satellite services

KEY FEATURES

FREQUENCIES

- Uplink (dual selectable band):
 - 12.75 – 13.25 GHz
 - 13.75 – 14.8 GHz
- Downlink (dual selectable band):
 - 10.7 – 11.2 GHz
 - 11.2 – 12.75 GHz

POWER SUPPLY

- Power consumption: < 45W
- Input supply from 12V to 18V
- Energy efficient design features and dedicated MCU

PERFORMANCE

- Selectable bandwidth: 400 kHz or 700 kHz
- Receiver sensitivity: < -105dBm
- RF output power: up to 5W

WORK ENVIRONMENT

- Operating temperature range: -20 °C to +70 °C
- Non-operating temperature range: -30 °C to +90 °C

INTERFACES

- 2.92mm gold plated RF connectors
- Space Qualified connectors
- TM/TC over RS485, RS422, RS232
- Additional debug and PC control

ACCOMMODATION

- Mass 1.2 kg
- Volume: 1 U (configurable)

