Azista SPACE

X-Band Satellite Data Transmitter

Up to 1 Gbps Data Transmission

An extremly compact cubesat compatible X-Band Transmitter designed for advanced missions for very high data throughput.



X-Band Satellite Data Transmitter

Features

- Very high throughput in the cubesat form factor. Also suitable for nano/micro/small satellites
- Wide range of Modulations - QPSK, 8PSK, 16APSK
- Flexible state-of-the-art modulation and error correction coding
- Adaptive coding and modulation to maximize throughput for various Es/No
- Customizable data and control interfaces

High speed data downlink from LEO

Compact Size

Easy Integration

Note: Images are for reference purposes only and may vary with upgraded products. As an OEM, the mentioned specifications are indicative and general. Specifications and features can be upgraded as per customer requirements.

Specification	Details
Throughput	**1 Gbps**
Modulation	QPSK, 8PSK, 16APSK
Transmission Frequency	Factory settable 8.1-8.5 GHz
Symbol rate	250 Msymb/s (customizable)
Frequency stability, including temperature and aging	±10 ppm
Control and telemetry interface	RS-485 or I2C or CAN-2B
Discrete telemetry	1 Temperature sensor DS18S20
Error correction coding and framing	DVB-S2
Spectral mask	SFCG-21-2R4; baseband SRRC 0.35
Output power	2.5 W
Power supply	12 V (11 - 16 V) non-isolated, 22 W power consumption (peak)
SEL tolerance	most parts >40 MeV·cm^2/mg, overcurrent protection
Operating temperature	-20°C to +50°C
Storage temperature	-50°C to +65°C
Radiation	Qualified for >30 krad
MTTF	250k hours
Data interface	Customizable LVDS or CMOS. 5 pairs for serial data (clock input/output, data, optional enable)
Connectors	Micro-D (MIL-DTL-83513) female (9-pin power, 21-pin data/control) SMA female 50 Ω RF output
Mass	360g
Size	87x93x30 mm^3

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