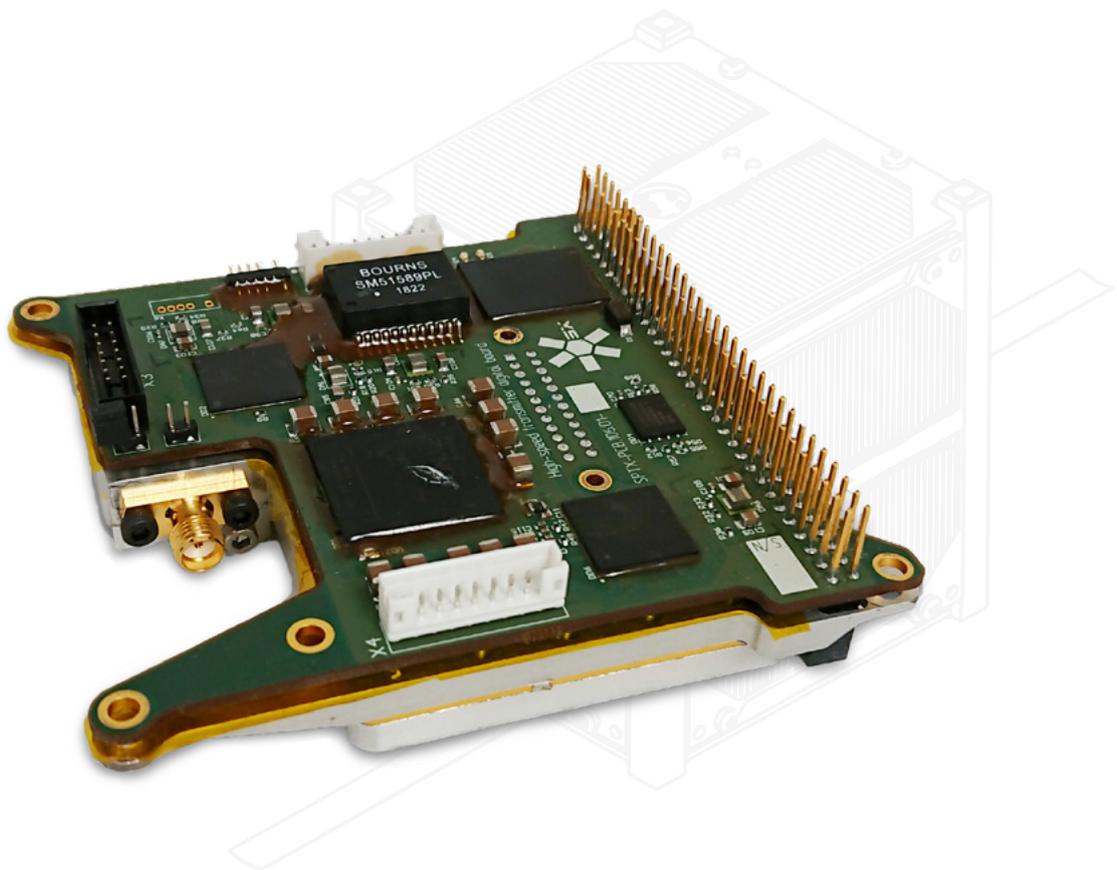


X-band transmitter

SXC-XTX-01



OrbiCraft-Pro SXC-XTX-01 On-board high-speed radio transmitter is designed for high-speed (not less than 10 Mbit/s) data transmitting to Earth on X-band frequencies (8175 – 8215 MHz)

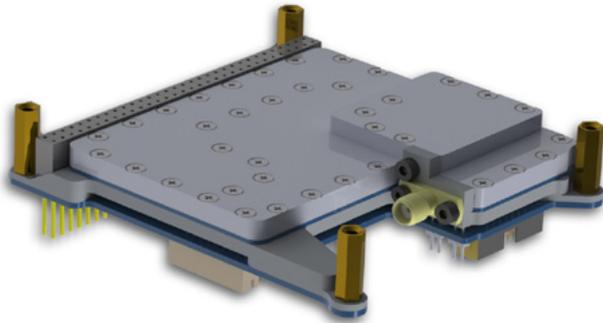
Features:

- Low power consumption
- Light weight
- Transmission data rates more than 10 Mbps
- Comon digital interfaces
- Output power - not less than 30 dBm (1 W)

Configuration:

- Covers the 8,175-8,215 GHz frequency range
- Exist version for the 10,45 GHz frequency

Product represents an on-board equipment unit, which is to be installed into structure of a CubeSat-format small satellite and connected to other on-board systems through PC 104 unified plug. Product can be connected to CAN2.0B bus.



Properties

Dimensions (w/o PC104 connector)	89 x 93 x 27 mm
Mass	195 g
Power consumption, max	Not more than 15 W
Internal memory	8 Gb

Performance

Operating frequency	8175-8215 MHz
Output power	Not less than 30 dBm (1 W)
Output impedance	50 Ohm
Modulation type	QPSK or modifications
Data transfer rate	Not less than 10 Mbit/s
Symbol rate	Min. 2, Max. 10
Protocol	DVB-S2 — ETSI EN 302 307-1 v1.4.1
Interfaces	Ethernet 10/100/1000, LVDS, CAN

Operating conditions

Operating temperature range	-10...+50°C
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Testing*

Tests	Options
Functional	QT, AT
Vibration	QT, AT (on demand)
Mechanical shock	QT
Thermal cycling	QT, AT (on demand)
Thermal vacuum	QT, AT (on demand)

QT – Qualifying tests
 AT – Acceptance tests
 *QT is performed on the design/qualification model
 AT is performed on the unit to be shipped