

The GomSpace NanoCom XT8250 is a flexible and efficient DVB-S2 compatible X-band transmitter system comprised of an integrated antenna and a SDR-based modulator. The system provides downlink rates up to 225Mbps.

The product is based on our flight proven series of Software Defined Radio (SDR) products and integrated antenna designs. With up to 3W RF output power and DVB-S2 compliance, the product is compatible with standard ground station services at X-band. The integrated antenna, includes antenna and power amplifier in a single module, to improve efficiency and reduces EMI inside the satellite.

The NanoCom XT8250 is ideal for innovative nanosatellite Remote Sensing missions requiring high downlink data rates. The modulator occupies a single PC104 style PCB inside the satellite while the integrated antenna occupies a 1U surface on the face of the satellite.

The modulator provides local data buffering of 124GB and data can be transferred to the modulator through three separate SpaceWire, CAN and RS-422 interfaces.



NanoCom XT8250 integrated antenna



Technical Information

NANOCOM XT8250 - KEY FEATURES:	
Communication / RF	 Configurable data-rate up to 225Mbps DVB-S2 compliant Configurable RF output power up to 3W
Antenna	 Frequency: 8000-8500 MHz Bandwidth: 500 MHz Polarisation: RHCP Gain: >13 dB (peak), >10 dB (20° beam width)
Modulator	 128GB local downlink data buffer 3xSpaceWire, CAN and RS-422 interfaces Supported Input Protocols: CSP and TCP/IP
Size, weight and power	Integrated Antenna: 1 U panel for mounting on satellite surface Mass: 240g DC Power consumption 11-23.5W (depending on settings) Modulator: 1 PC104 type board for internal mounting Mass: 320g DC Power consumption 3.5-5W (depending on mode)



