## GOMSPACE



The GomSpace NanoCom XT8250 is a flexible and efficient DVBS2 compatible X-band transmitter system comprised of an active antenna and SDR-based modem. The system provides downlink rates up to 225Mbps.

The product is based on our flight proven series of Software Defined Radio (SDR) products and active antenna designs. With up to 3W of RF output power and DVBS2 compliance, the product is compatible with standard ground station services in the X-band. The active antenna, which integrates antenna, LNA and PA in a single board, helps improve efficiency and reduces EMI inside the satellite.

The NanoCom XT8250 is therefore ideal for innovative nanosatellite Remote Sensing missions requiring high downlink bandwidth. The product will occupy a single PC104 style PCB for the modem inside the satellite and the active antenna will occupy a 1U surface on the face of the satellites.

The modem implementation provides local data buffering of 28GB and data can be transferred to the modem through SpaceWire, CAN or RS-422 interfaces.



NanoCom XT8250 active antenna

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## **Technical Information**

NANOCOM XT8250 - KEY FEATURES:	
Communication / RF	<ul> <li>Configurable data-rate up to 225Mbps</li> <li>DVB-S2 compliant</li> <li>Configurable RF output power up to 3W</li> </ul>
Antenna	<ul> <li>Frequency: 8000-8500 MHz</li> <li>Bandwidth: 500 MHz</li> <li>Polarisation: RHCP</li> <li>Gain: &gt;13 dB (peak), &gt;10 dB (20° beam width)</li> </ul>
Modem	<ul> <li>28GB local downlink data buffer</li> <li>SpaceWire, CAN or RS-422 interfaces</li> <li>Protocol support: CSP, CCSDS and TCP/IP</li> </ul>
Size, weight and power	<ul> <li>Antenna:</li> <li>1U panel for mounting on satellite surface</li> <li>Mass: 240g</li> <li>Power: 0.2 - 25W (depending on settings)</li> <li>Modem:</li> <li>1 PC104 type board for internal mounting</li> <li>Mass: 270g</li> <li>Power: 0.5-4.5W (depending on mode)</li> </ul>



