

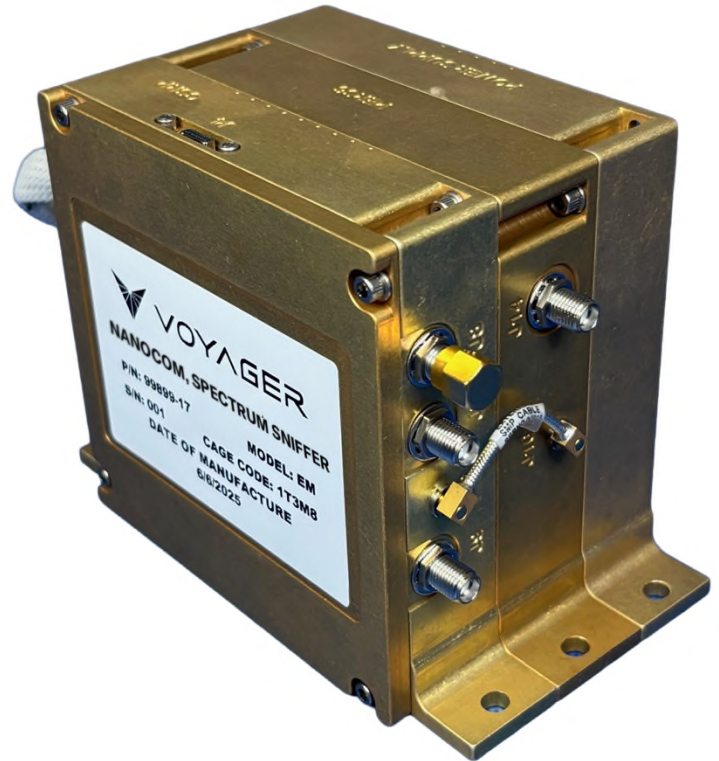
NANOCOM™ Software-Defined Transceivers

Spectrum Sniffer Configuration

OVERVIEW

Nanocom™ SDR has three (3) RF channels for spectrum sniffing with two (2) independent LOs and sends the data over Aurora to the memory module for storage or stores locally.

Nanocom™ SDR is programmable on orbit and contains a Xilinx Zynq System on a Chip (SoC) whose large availability of programmable logic resources support sophisticated algorithms.



KEY FEATURES

- Low SWaP
- On-orbit reprogrammable
- FW/SW co-development
- Zynq 7045 SoC; Dual-core ARM Cortex-A9

APPLICATIONS

- Commercial and Military SDR
- Mission Data Transmitter
- Signal Intelligence Receiver
- Satellite Orbits: LEO, MEO, GEO, Cislunar

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PRODUCT SPECIFICATIONS

RECEIVER	
Frequency	70 – 6000 MHz
Memory	128 GB Flash, 300 MB/s
RF Channels	3 channels, 2 independent LOs
Dynamic Range	-70 dBm to 0 dBm
Max Input Power	+2 dBm
Channel Bandwidth	56 MHz

Spectrum Sniffer SDR	
Outline Dimensions	12.7 cm x 7.2 cm x 9.7 cm
Mass	1.2 kg
Mission Life	Up to 7 years
Radiation	20 krads, LET > 43 MeV parts level
Input Voltage	18 - 40 VDC isolated
Power Consumption	< 28 W
EMI/EMC	MIL-STD-461
Data/Ctrl Interfaces	RS-422, SpW, CAN, 1PPS, 4 Aurora lanes (2 Gbps/lane)
Temperature Range	-30 °C to +60 °C operating, -40 °C to +85 °C (unpowered)
Vibration	GSFC-STD-7000 (NASA GEVS) Qual Levels