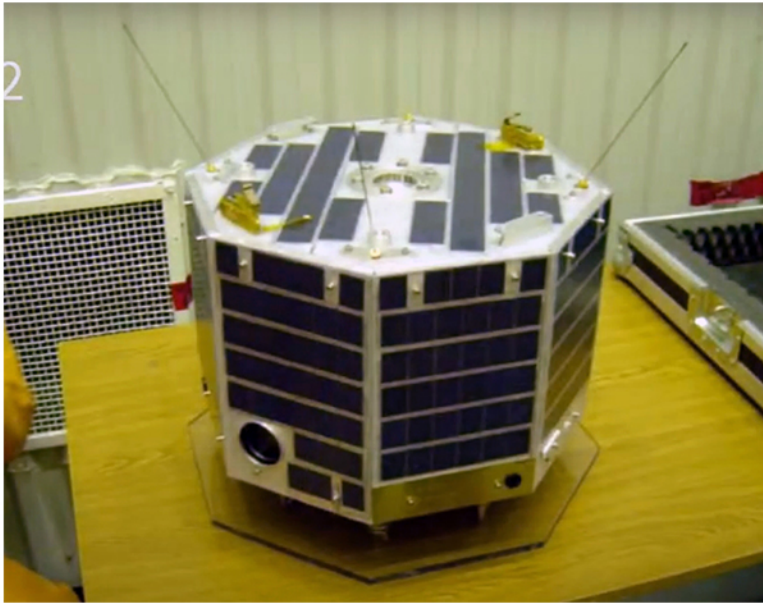


UniSat-2



UniSat-2 (University Satellite-2)

UniSat-2 is a follow-up microsatellite project of the University of Rome (Universita di Roma "La Sapienza", Scuola di Ingegneria Aerospaziale). The overall objective of this mission is to develop, and demonstrate an onboard micro-propulsion system, followed by a performance assessment. Such a system might eventually be used for future precise attitude control of a nanosatellite.

Spacecraft:

UniSat-2, built by the GAUSS Laboratory of the University of Rome, is a spin stabilized spacecraft with the same dimensions as those of UniSat-1 consisting of an octagonal prism of 150 mm side length and 250 mm in height. The S/C has a modular structure made of five Al/Al honeycomb plates, kept together by four aluminum bars. Eight Al/Al honeycomb lateral panels, with surface-mounted solar panels, complete the satellite cylinder structure.

The S/C architecture consists of a multipurpose bus, able to accommodate several kinds of payloads (a tray system), and to accommodate change. The overall design permits easy assembling and disassembling, where each plate is devoted to a subsystem, thus allowing separate testing just before final integration. A Li-ion battery is used for ecliptic-phase operations, the S/C mass is 12 kg.

Launch: A launch of UniSat-2 from the Baikonur Cosmodrome on a Dnepr-1 vehicle took place on Dec. 20, 2002.



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