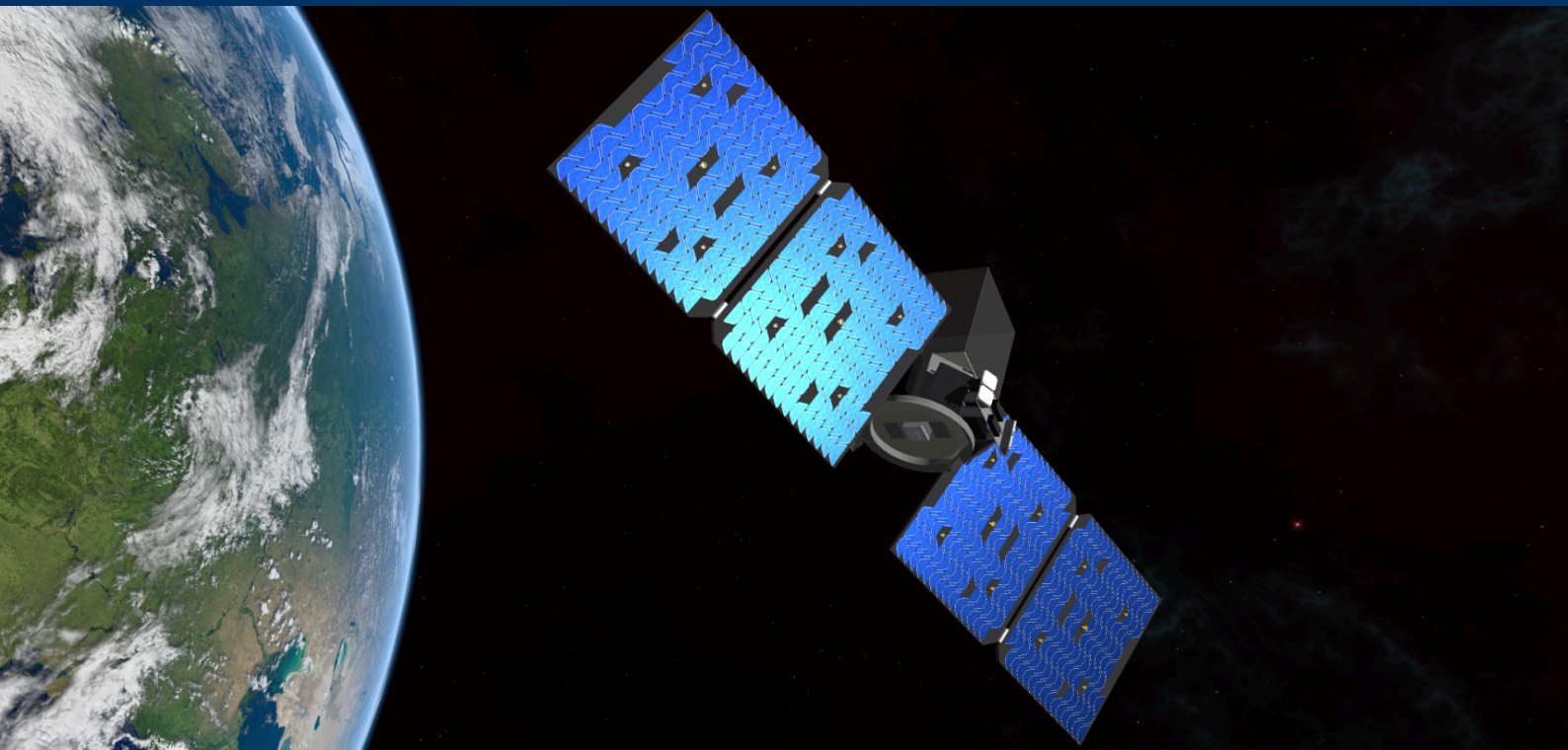
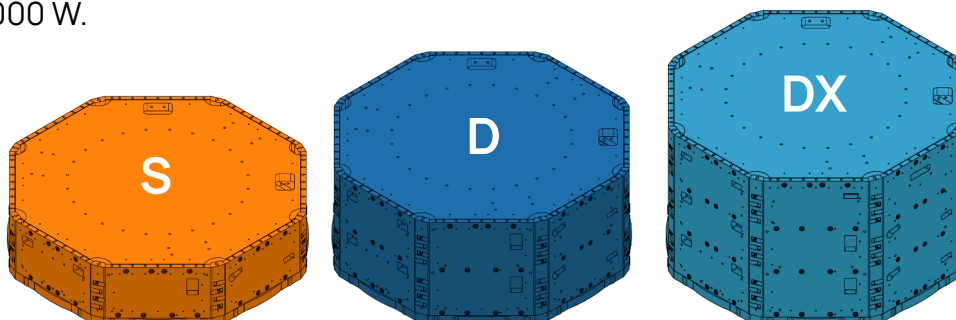




LEOS-100 PLATFORM

The LEOS-100 takes small spacecraft platforms above and beyond. It is designed for mass manufacturing and focuses on modularity. The design is built on the proven LEOS-50 avionics, using standardized building blocks such as internal decks and octagon walls.

There are three versions of the LEOS-100: LEOS-100-S, LEOS-100-D, and LEOS-100-DX. The LEOS-100-D is best for high reliability missions, offering full redundancy through duplication of avionics to remove any single points of failure from the spacecraft platform. The LEOS-100-DX is another version of the LEOS-100-D, but best suited for high power mission options with a required payload peak power of up to 4000 W.



TECHNICAL SPECIFICATIONS

PLATFORM FEATURES		LEOS-100-S	LEOS-100-D	LEOS-100-DX
Payload Capacity	Only constrained by launch vehicle	+	+	+
Design Life	5 years in LEO (500 – 800 km), all inclinations	+	+	+
Modular Platform	EO, COM, LEO-PNT, ISAM	+	+	+
Heritage	Flight proven avionics	+	+	+
Reliability	No single point of failure		+	+
High Power	2.4k W solar panel 4k W payload peak			+

PERFORMANCE SUMMARY		LEOS-100-S	LEOS-100-D	LEOS-100-DX
Payload Dimensions	Only constrained by launch vehicle			
Payload Data Rate	Up to 10 Gbps			
Payload Data Storage	1 TB per DPU (can be increased up to 8+ TB)			
Payload Data Downlink	X-band up to 1.2 Gbps, 2.5 Gbit/s optical as an option			
Payload Peak Power	660 W	1300 W	Up to 4000 W	
Solar Panel Peak Power @AM0, 70°C	675 W	1300 W	2650 W	
TM/TC Interfaces (Bus ↔ Payload)	RS422, RS485, CAN, Ethernet			
TM/TC Protocols (Bus ↔ Payload)	BST Protocol E, PUS			
Propulsions	Electrical and/or chemical			
Communications Protocols	CCSDS compatible Fully encrypted and authenticated with AES-GCM (256 bit)			
Communications Security	Key exchange via 3072 bit RSA Diffie-Hellmann Post Quantum Cryptography as an option			