



LEOS-50

Marking a major milestone in orbital capability, the LEOS-50 stands as the first generation of satellite platforms developed by Berlin Space Technologies. It is a small spacecraft platform for medium-sized payloads. BST suggests using the spacecraft platform for payloads with a mass up to 30 kg, like our HRVI-2HD.

CHARACTERISTICS

System	Volume: 570 x 570 x 400 mm ³
	Mass: 75 kg with electric propulsion
	Design Life: 5 years in LEO
Payload	550 x 550 x 400 mm ³
	15 - 30 kg (recommended)
	25 W av. 160 W peak
Bus	Very Fast Target Pointing (5°/s), S-Band TT&C, 320 Mbit/s X-Band downlink, Fully Encrypted Data (Data & TT&C), Electrical Propulsion

TECHNICAL SPECIFICATIONS

SYSTEM SPECIFICATION	SPECIFICATION	COMMENTS
Payload Data Rate	Up to 10 Gb/s	
Payload Data Storage	1 TB per DPU	
Payload Data Downlink	X-Band, up to 100 Mb/s	
TM/TC Protocols	RS422, LVDS, others	
Redundancy	Selected Subsystems	
Communications Protocol	CCSDS compatible	
Communications Security	Authentication & encryption	
Resolution (PAN / MS)	1.92 m / 7.68 m	@ 500 km
Swath Width	> 14.6 km	@ 500 km
Channels	1x PAN & 4x MS	PAN: 450 - 900 nm
		BLUE: 450 - 520 nm
		GREEN: 520 - 600 nm
		RED: 630 - 690 nm
		NIR: 750 - 900 nm
MTF	> 0.1	@ full resolution and across the field
	SNR > 100	
Size	520 x 780 x 335	Including baffle
Total Mass	19 kg	
Total Temperature Range	0 to 30°C / -15°C to +35°C	OP / Non-Op
Design Life	5 years in LEO	