



hemeria



COMMUNICATION

SPECTRA-L40 Smallsat

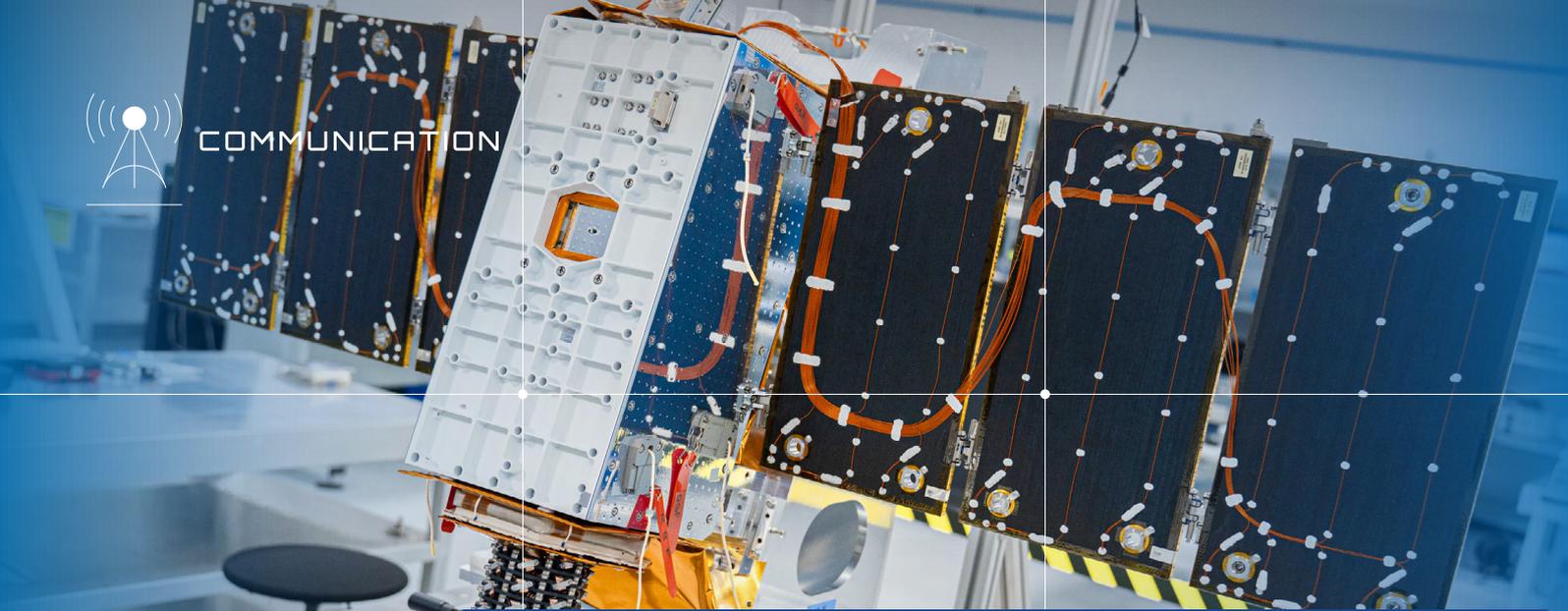
Alone or constellation

Lifetime up to 8 years

Optimized cost and lead-time

LEO orbit

Build your own space-based, low-speed telecommunication network or RF based remote sensing network with HEMERIA'S SPECTRA-L40 range. These satellites are designed to provide a very high level of performance over a lifetime up to 8 years.



Approved by: Kineis (25 sat. in orbit, 99.9% platform availability) and ESA

Main characteristics

		Standard bus
Mission lifetime		5 years 8 years (option)
Platform size		220 x 230 x 500 mm
Platform mass		20 kg
Max. payload mass		20 kg
Max. payload volume		7U Internally + 220 x 230 x 400 mm
Payload power (EOL @ 600 km SSO)	10H30	40 W (avg.)
	6H00 - 18H00	65 W (avg.)
	Peak	200 W
Data & power interfaces		LVDS, LVTTTL, RS 485/422, CAN, SpW Optional: SPI, I2C Regulated 5V, Unregulated: 15-17V Optional: 3.3V, 12V, 28V All lines protected by LCLs
Battery energy capacity		216 Wh
Uplink rate		64 kbps (S-band)
Downlink rate		1000 kbps (S-band) X-Band (option) 230-310 Mbps
Delta-V		80 m/s – 150 m/s (option)
Thrust		> 300 μN
Position accuracy		4 m
Motion accuracy		3 cm/s
Time accuracy		100 ns
Payload LoS Attitude pointing error		0.7° @3sigma 0.09° @3sigma (Option)
Payload LoS Attitude knowledge error		0.7° @3sigma 0.085° @3sigma (Option)
AOCS pointing modes		Geocentric / Sun Option: Target / Inertial / Polynomial / From payload
Data storage for payload		28 Go (Baseline) + 32 Go (Option)