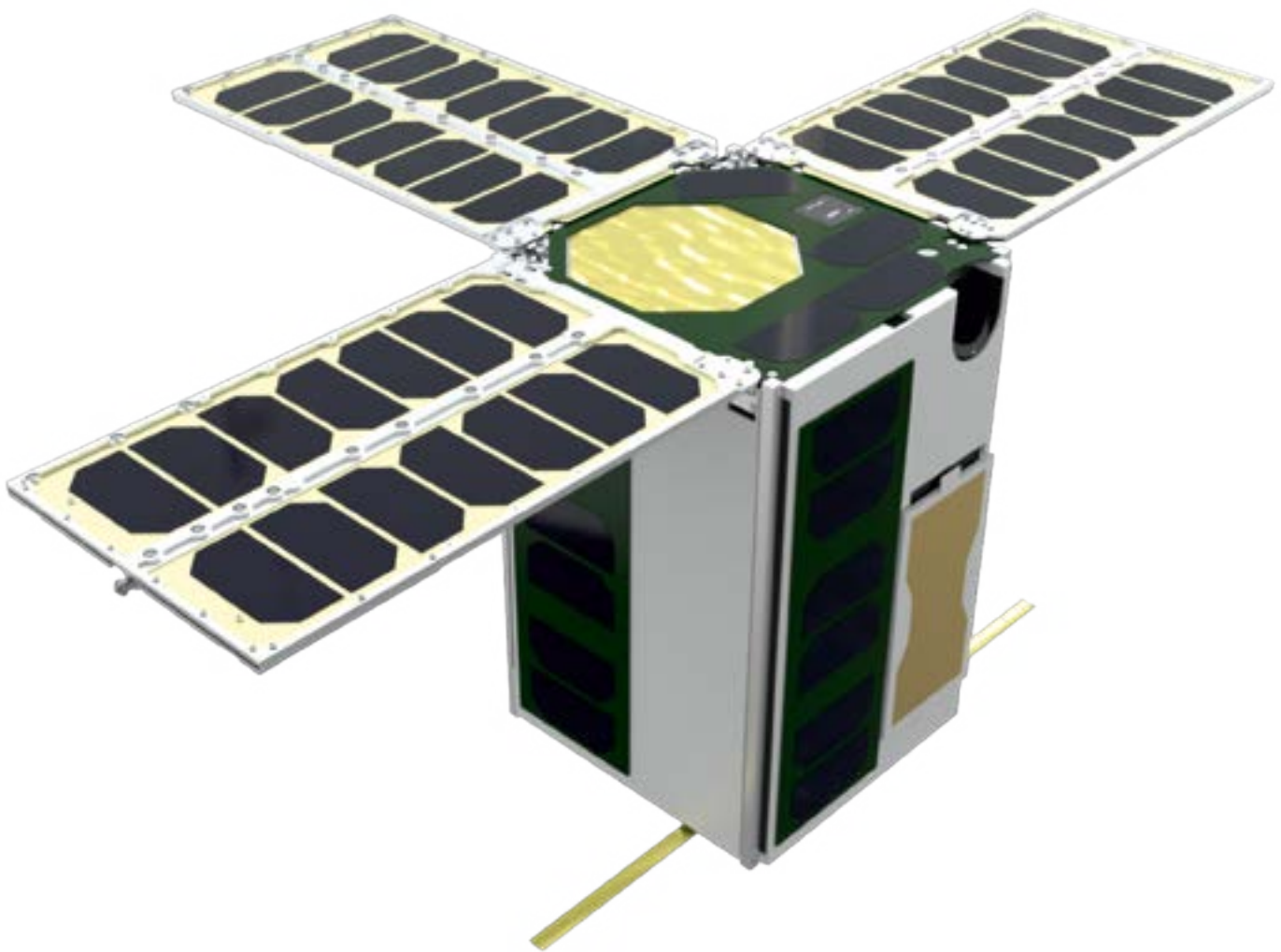
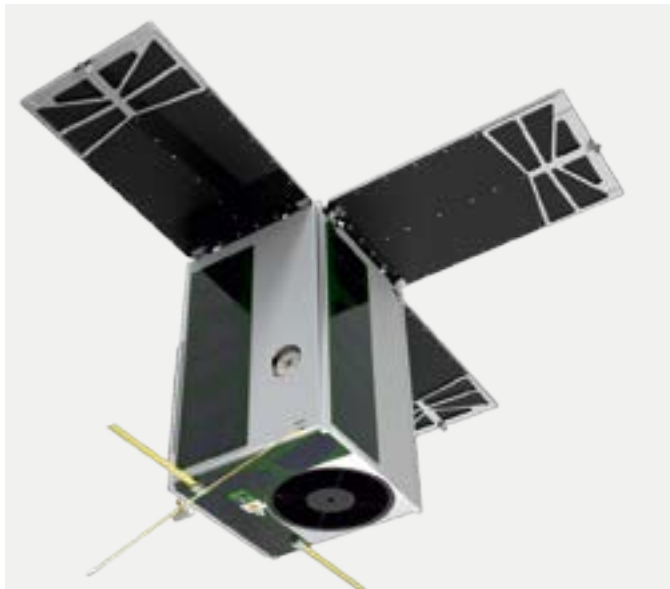


Ultra-small remote sensing satellite based on CubeSat platform



ULTRA-SMALL REMOTE SENSING SATELLITE BASED ON CUBESAT PLATFORM

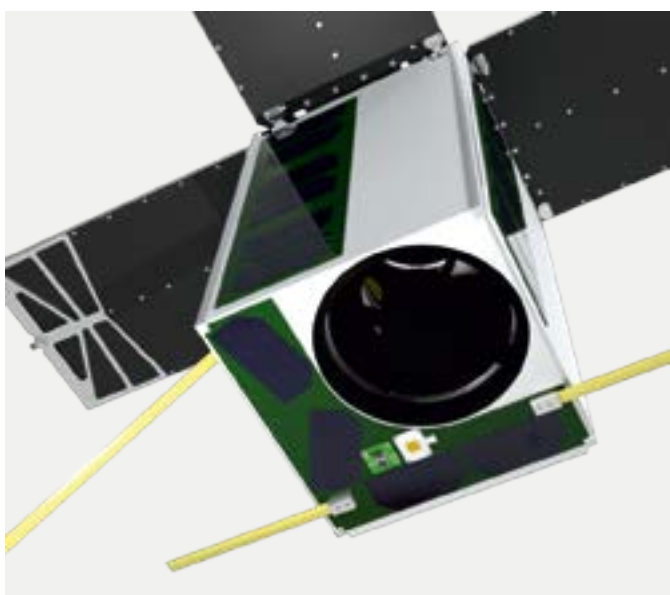
A spacecraft based on the SXC 12 CubeSat satellite platform, designed for Earth remote sensing (ERS) with a resolution of 2.75 meters per pixel in 4 spectral bands.



Spacecraft appearance



Serbia. Belgrade.



*View from the camera.
Camera 2.75 meters per pixel in 4 spectral bands*



It can also be equipped with an Automatic Identification System (AIS) for vessel monitoring.

 **MORE INFO HERE**



Egypt. Cairo.

Technical parameters of satellite:

PARAMETERS:	VALUE:
Mass	30 kg
Outer dimensions (with separation springs pressed-in) nominal	226,3 x 226,3 x 340,5 mm
Battery capacity	120 W*h
Onboard bus voltage	6,0 V – 8,4 V
Service radio frequency*	400-403 MHz or 435-438 MHz
Data rate	до 57600, 4800 (on launch) , bps
The main frequency band of a high-speed data transmission channel*	8175 – 8215 MHz or 10450-10500 MHz
High-speed data link signal protocol	DVB-S2
Transmission rate over a high-speed data link	Up to 500 Mbts
Maximum power of the high-speed transmitter, not less than	2 Wt
Antenna type of high-speed transmitter	Weakly directional with circular polarization RHCP
Type of command radio channel antenna	Non-directional with linear polarization
The power of the command radio channel transmitter, not less than	Managing – 2 Wt, Backup – 2 Wt
ADCS system	Reaction wheels module, electromagnetic
Sensors	Star tracker, Sun sensors, Magnetometer
ADCS algorithms	B-DOT, sun orientation, nadir, point trace
ADCS type	Gyroscopic (flywheel engines)
ADCS pointing accuracy	up to 0,1°
Type of AIS receiver antenna **	Non-directional with linear polarization
The range of received AIS signals **	156,025-162,025 MHz
The volume of memory for storing AIS data, not less than **	500 MB
Number of spectral bands of the camera	4 (multispectral)
Spectral bands	450 – 520; 530 – 590; 630 – 690; 760 – 900 nm
Pixel projection in nadir*	2,75 m
Swath in nadir*	Not less than 12,2 km

*the height of the orbit for calculating the characteristics is 500 km

**in case of installation on the satellite



SPUTNIX LLC is a Russian private company manufacturing high-tech small satellite components and platforms, as well as ground equipment for smallsat testing, ground-based satellite stations, and equipment for aerospace education.



 42, bld. 1, Bolshoy Boulevard,
Skolkovo Innovation center,
Moscow, 121205, Russia
 +7 (499) 322-43-15
 contact@sputnix.ru
 www.sputnix.ru
 t.me/sputnixru