

Geoscan 1U and 3U specifications

Specification	1U	3U
Assembled weight (without a payload)	0,8-1 kg	1,5 kg
Maximum weight including a payload	1,33 kg	4 kg
Dimensions folded	110x110x113,5 mm	110x110x340,5 mm
Maximum weight of a payload	0,33...0,50 kg	2,5 kg
Available volume for a payload	82x82x60 mm	92x82x270 mm
Available supply for a payload	12 B / 2 A 5 B / 3 A	12 B / 4 A 5 B / 3 A
Payload average power at LEO	500 mV	2600 mV
Available maximum output of a payload	Up to 35 W	Up to 50 W
Storage battery capacity	40 W*h	
Battery type	Li-ion 2S 7200 mAh	
Battery nominal voltage	7,4 V	
Number of solar panels	5 pcs	12 pcs
Peak output produced on 1 solar panel in LEO	1,5 W	
Onboard interface	I ² C, UART	
Payload interface	UART/CAN/RS-485	
Antenna type	UHF dual dipole X-band patch antenna	
Control radio channel frequency	435-438 MHz, frequency modulation	
Data transmission speed through radio channel	1200, 2400, 4800, 9600, 14400, 19200 bit/s	
High-speed transmitter frequency	10.4 GHz, frequency modulation	
High-speed radio channel data rate	Up to 1 Mbit/s	
Stabilization system	Electromagnetic	
Orientation determination	2 three-axis magnetometers, 6 solar sensors	
Orientation modes	Stabilization of rotation, pointing to the Sun or to the Earth coordinates according to a program	
Accuracy of orientation system	5°	
Design lifetime	At least 2 years	

