

STARS-II Power budget

System	Part	Voltage	Current	Consumption
		[V]	[mA]	[mW]
C&DH	Circuit	5	150	750
	Bluetooth	5	100	500
	GPS	5	160	800
	Sensors	5	210	1050
Power	Circuit	7.4	160	1184
	Solar cell generating	18.4	880	16192
Communication	Circuit	5	20	100
	CW transmitter	4.2	100	420
	FM receiver	4.2	25	105
	FM transmitter	5	500	2500
Camera	Circuit	5	450	2250
	Camera 0	5	24	120
	Camera 1	5	24	120
Robot	Arm motor 0	7.4	720	5328
	Arm motor 1	7.4	720	5328
Deployment	Reel motor	7.4	720	5328
	Reaction wheel	7.4	720	5328

Mother Satellite		
Mode	Current	Consumption
	[mA]	[mW]
Nominal	825	4409
FM transmitting	1325	6909
Taking Pictures	1323	6899
Mission	2863	18055

Daughter Satellite		
Mode	Current	Consumption
	[mA]	[mW]
Nominal	825	4409
FM transmitting	1325	6909
Taking Pictures	1323	6899
Mission	2863	18055

Li-ion Battery specification

Voltage : 3.7V
Capacity : 1200mA

Solar array cell specification

Size : 68.9 × 39.5 × 0.14 mm
Efficiency : 27.5 %
Voc : 2600 mV
Isc : 465.385 mA
Vmp : 2300 mV
Imp : 440.891 mA