

Spacecraft Power Budget

Subsystem	Components (Number)	Voltage	Operating Typ. Current	Max. Current	Consumption (Total)
C&DH	On-board Computer (2)	5V	200mA	400mA	1W (2W)
Attitude Control	Magnetic Torquer (3)	5V	100mA	300mA	0.5W (1.5W)
	Magnetic Sensor	9V	30mA		0.27W
	Gyro Sensor (3)	5V	50mA	170mA	0.25W (0.75W)
Optics	CMOS Sensor	3.3V	240mA		0.792W
Engine	Power Supply	12V	240mA	500mA	2.5W
Communication	*1)FM Transmitter	5V	600mA	650mA	3W
	*1)CW Transmitter	5V	95mA	120mA	0.475W
	*1)FM Receiver	5V	26mA		0.13W
Power Supply	*2)Battery	3.7V	1200mA		4W
	*3)Solar Panel	630mV	1125mA		0.55W

*1) Including communication controller.

*2) Lithium Ion Battery

*3) Values per 6cm * 4cm solar cell

Summary

Subsystem	Voltage	Typ. Current	Consumption & Supply
C&DH	5V	400mA	2W
Attitude Control	5~9V	480mA	2.52W
Optics	3.3V	240mA	0.792W
Engine	12V	240mA	2.5W
Communication	5V	721mA	3.608W
Total			11.42W
Power Supply			*4)15W

*4) Assumed that 20 solar panels will operate.