

# OMUSAT-III Power Budget



# Table 1. Power calculation table by PDU.

<b>Belonging Power Delivery Unit</b>	<b>Requires electricity [mW]</b>	<b>Duty Cycle [min]</b>	<b>Energy Consumption per orbital period[mWh]</b>
Normal operation	327	88	490
Com(FM)	5000	13	722
Com(CW)	857	90	857
Heater	1086	15	181
grid projection method Mission	3563	1	39
SSTV Mission	3577	5	198
Posture control	1272	10	141

## Table 2. Electric power requirement by mode.

<b>Mode</b>	<b>Mode detail</b>	<b>Energy Consumption per orbital period[mWh]</b>
normal operation	Normal mode. FM communication are enabled.	2260
Attitude measurement	Attitude measurement and CW communication are enabled.	141
Mission(grid projection method)	This mode deploys the membrane and projects a grid pattern for imaging.	932
Mission(SSTV)	Slow Scan Television mode.	198

**Table 3. The result of estimating electric power per orbital period.**

<b>Electric power generation [mWh]</b>	<b>Electric power in allowable load[mWh]</b>
3150	2260