

Assumptions for Unavailable Masses/Powers/Volumes

| Type | Mass | Power | Volume |
|------------------------|-------------|-------------|------------|
| Altimeter | 700 | 1.5 | 0.5 |
| Camera | 200 | 1.5 | 0.5 |
| Detector | 50 | 1.5 | 0.5 |
| Imager | 500 | 1.5 | 0.5 |
| Imaging Spectrometer | 3000 | 1.5 | 0.5 |
| Magnetometer | 200 | 1.5 | 0.5 |
| Particle Detector | 850 | 1.5 | 0.5 |
| Radiometer | 800 | 1.5 | 0.5 |
| Radio | 800 | 1.5 | 0.5 |
| Spectrometer | 600 | 1.5 | 0.5 |
| ACS | 800 | 3 | 0.65 |
| Actuator | 500 | 3 | 0.2 |
| Sensor | 100 | 1 | 0.2 |
| Bus | 1500 | 8 | 2 |
| Image Processor | 700 | 3 | 0.2 |
| OBC | 200 | 1.5 | 0.3 |
| H-G Antenna | 800 | 5 | 0.4 |
| L-G Antenna | 70 | 5 | 0.1 |
| Transciever | 500 | 5 | 0.1 |
| Battery | 500 | 9 | 0.25 |
| PCU | 300 | 0.1 | 0.25 |
| Non/Deployed Panels | * | * | * |
| Sail | 2000 | 3 | 1.5 |
| Thruster | 1000 | 12 | 1 |
| Active Thermal Control | 250 | 0.1 | 0.25 |
| Deployer | unnecessary | unnecessary | * |
| Thermal | negligible | none | negligible |
| * indicates mandatory | | | |