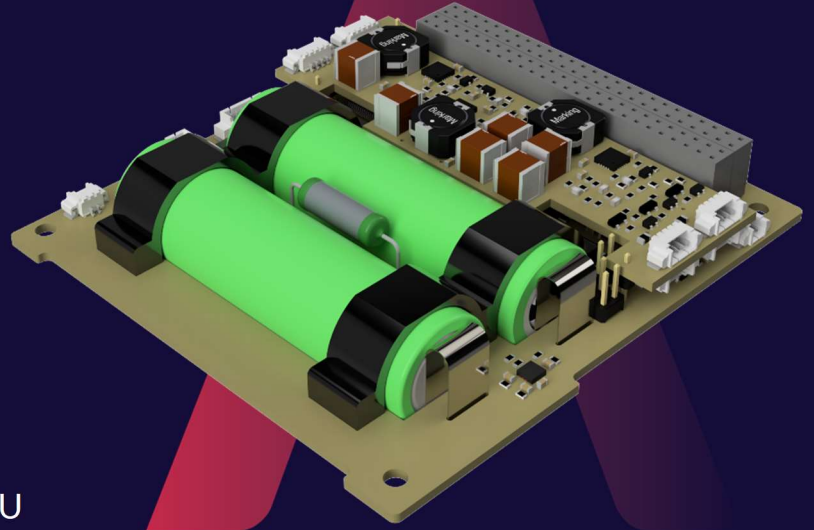




SPACEMANIC

AMUN Power Supply Unit

SM-PSU-AMUN



Power supply unit for small satellites in PC/104 form factor. Suitable for 1U CubeSat size satellites.

FEATURES

- Plug&Play Design
- Compatible with Spacemanic CubeSat standard
- Compatible with CubeSat components from other vendors
- Robust design
- CubeSat Space Protocol compatible

PRODUCT PROPERTIES

- Operating temperature: $-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$
- PC/104 form factor
- Mass: 200g
- 3 x MPPT channel (1U 5.5V 550mA max per channel)
- 2 x regulated power bus (5V, 3.3V)
- 6 x power output (fixed 5V, fixed 3.3V, 4 configurable 3.3V or 5V)
- 1 x unregulated battery output
- Onboard battery pack
- Onboard battery heating and thermal control

FUNCTIONAL CHARACTERISTICS

- Battery capacity: 20Wh
- Battery voltage: nominal 7.2V, max 8.2V
- Solar input power: 2.5W per MPPT channel
- 6 x solar panel connectors

INTERFACES

- 1 x I2C (CSP)
- 1 x RS485 (CSP)
- 1 x CAN (CSP)
- 1x CLI UART
- External reset input
- 6 x solar panel input

TESTING & HERITAGE

- Based on Flight Heritage Hardware
- Successful vibration & heated vacuum tests
- Radiation tests (TID @ 20 krad, SEE @ 60 MeV)