[[State\_Of\_The\_Art\_EPS|State of The Art]]

[[Requirements\_EPS|Requirements]]

[[System\_Specifications\_EPS|System Specifications]]

[[Sizing\_EPS|Sizing]]

[[Feasibility\_Study\_EPS|Feasibility Study]]

[[Model\_EPS|Model]]

The '''Electrical Power Supply''', or EPS of the [http://ece3sat.wikia.com/wiki/What\_is\_a\_CubeSat\_%3F CubeSat] is composed by three modules which are the '''PCC''' (Power Control Circuit), the '''PV''' (photovoltaic panel) and the '''BAT'''(Battery). The role of the EPS is to generate, store and distribute the electricity produced by the solar panels.

==Subsystems of EPS==

'''PCC''' is responsible for the voltage regulation, the modules protection and the energy distribution. In others words, it has to manage the energy through the [http://ece3sat.wikia.com/wiki/The\_ECE3SAT\_Project ECE3Sat]. It communicates with the [http://ece3sat.wikia.com/wiki/On\_Board\_Computer\_(OBC) OBC], thanks to a microcontroller.

The '''PV''' has to generate the electricity using the sunlight and the photovoltaic effect. This will be possible thanks to five solar panels, on each side of the CubeSat.

The '''BAT''' module has to store this energy to enable its using at any time.

[[File:EPS subsystems.jpg|centre|thumb|500x500px|''EPS Subsystems'']]