Initial prototyping for the 3U CubeSat power system will attempt to model a maximum load system.

Items:

Raspberry Pi - QSET inventory

2 x $12.99

Board: Elegoo UNO R3 - compatible with Arduino R3

<https://www.amazon.ca/Elegoo-ATmega328P-ATMEGA16U2-Compatible-Arduino/dp/B01EWOE0UU/ref=sr_1_10?s=electronics&ie=UTF8&qid=1480274719&sr=1-10&keywords=arduino>

2 x $25.44

Transceiver: CC1101 RS232 433MHz Transceiver

<https://www.amazon.ca/CC1101-wireless-transmission-transceiver-module/dp/B00SD2HIIE/ref=sr_1_1?ie=UTF8&qid=1479672930&sr=8-1&keywords=RS232+wireless+transmission>

6 x $8.70

Solar Panels

<https://www.aliexpress.com/item/Mini-5V-2-3W-460ma-Solar-Panel-Solar-System-Module-DIY-For-Battery-Cell-Phone-Chargers/32728990887.html?ws_ab_test=searchweb0_0,searchweb201602_1_116_10065_117_10068_114_115_113_10000007_10084_10083_10080_10082_10081_10060_10061_10062_10056_10055_10054_10059_10099_10078_10079_10073_10097_10100_10096_10070_10052_10050_424_10051,searchweb201603_6&btsid=dddef12e-9f10-46be-aa95-7c7f12fd6867>

4 x $25.40

Batteries

<https://www.amazon.ca/Samsung-INR18650-25R-2500mAh-Rechargeable-Batteries/dp/B00NUI46HM/ref=sr_1_1?ie=UTF8&qid=1480279110&sr=8-1&keywords=18650+sony>

To the future

EPS for actual satellite: <https://www.clyde.space/products/5-3rd-generation-3u-eps>

Prototype EPS ideas:

<http://www.freechargecontroller.com/Free_Charge_Controller>

<https://www.organicdesign.co.nz/Charge_controller_project>