Some additional insights into parts used  
  
POWER REGULATOR

Used for 5V – 10V systems (Protected to 28V)

Can take up to 1.5A (Currently at 1.0A)

Does load sharing, so it can prioritize other power source before battery

Can use 3.7V/4.2V Li-On batteries.

BATTERY

6600 mAh @ 3.7V

Charge Rate: 0.5C /1.1A @ 4.2V (4.62W)

Peak Charge Rate: 3.3A

Constant Discharge Rate: Under 0.2C/1.3A is Recommended

0% @ 3.0V Reading

SOLAR PANEL

Open CKT Voltage: 7.09V

Peak Voltage: 6.07V

Peak Current: 200mA

Peak Power: 1.22W