Max power / case #1:

Ground pointing with comm2 transmitting.

Reaction wheels: 204mA

Estimator and other ADCS MSPs: 329.55mA

Comm 2 on 2423mA

Comm 1 idle 53mA

Power system with heaters on 205mA

RAHS 290mA

**Total 3504.55**

Max power case #2

Velocity pointing with PPT at peak of sawtooth waveform. (in reality this is not continuous power, but I am curious if it will exceed 10 amps.)

PPT (PEAK CURRENT) 8A

Comm 1 transmitting 190mA

Power system with heaters on 205mA

Reaction wheels: 204mA

Estimator and other ADCS MSPs 329.55mA

**Total 8928.55**

Normal case

PPT (average current) 1060mA

Comm 1 transmitting 190mA

Power system with heaters on 205mA

Reaction wheels: 204mA

Estimator and other ADCs MSPs 329.55

**Total: 1988.55**

**Conclusion:**

**Even using the PPT’s peek current draw as a continuous load, the max power does not exceed 10A. A 10A solid state relay will be sufficient for use as the deployment switch especially considering the solar panels will provide power to offset some of the max current through the battery switch.**