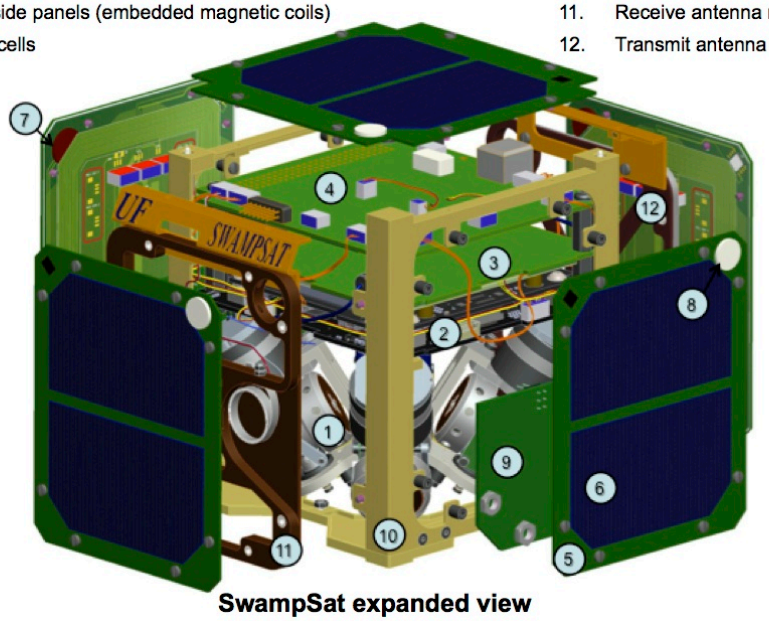
SwampSat CubeSat Description
University of Florida – 1U

1. CMG (Pyramidal configuration)
2. Electrical power system
3. SwampSat Transceiver
4. SFC430
5. PCB side panels (embedded magnetic coils)
6. Solar cells
7. Sun sensor
8. Sun sensor filter
9. Motor driver board
10. Structure
11. Receive antenna module
12. Transmit antenna module



SwampSat expanded view

The SwampSat mission shall demonstrate rapid retargeting and precision pointing (R2P2) maneuvers using miniaturized control moment gyroscopes (CMGs) developed at the University of Florida (UF). Successful completion of the SwampSat mission will raise the technology readiness level (TRL) of the UF CMGs known as IMPACT for integrated miniature pyramidal arrangement of CMGs for high torque.

The satellite utilizes a communication system which is necessary to uplink commands and downlink data containing spacecraft health as well as payload test results.