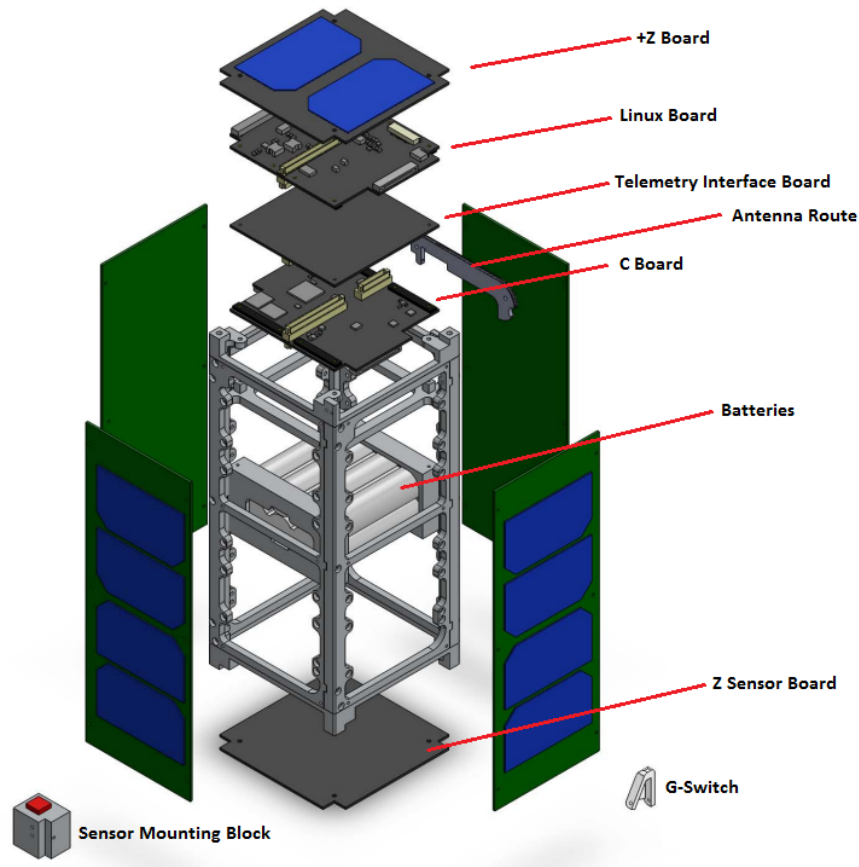


LEO Mission Description



LEO will record vibrational and thermal measurements with two accelerometers and a thermocouple and also record vibrational data taken by a second CubeSat that will be transferred through WiFi during launch.

Upon deployment from the P-POD, LEO will turn off its WiFi module and take pictures of the StangSat CubeSat as they separate. 45 minutes after deployment the antenna will be deployed and the UHF beacon will be activated. For the first few passes the ground station operators will attempt communications to perform checkouts of the spacecraft. Data from the requested EOIs will then be able to be downlinked.

After the data is successfully received at the ground station, LEO will continue to operate throughout the orbital life (approx 2.9 years) as a digipeater for HAM operators who will have access to telemetry data from the LEO beacons.

The CubeSat structure is made of Aluminum 6061-T6. It contains all standard commercial off the shelf (COTS) materials, electrical components, PCBs and solar cells.

There are no pressure vessels, hazardous or exotic materials.

The electrical power storage system consists of common lithium-ion batteries with over-charge/current protection circuitry.