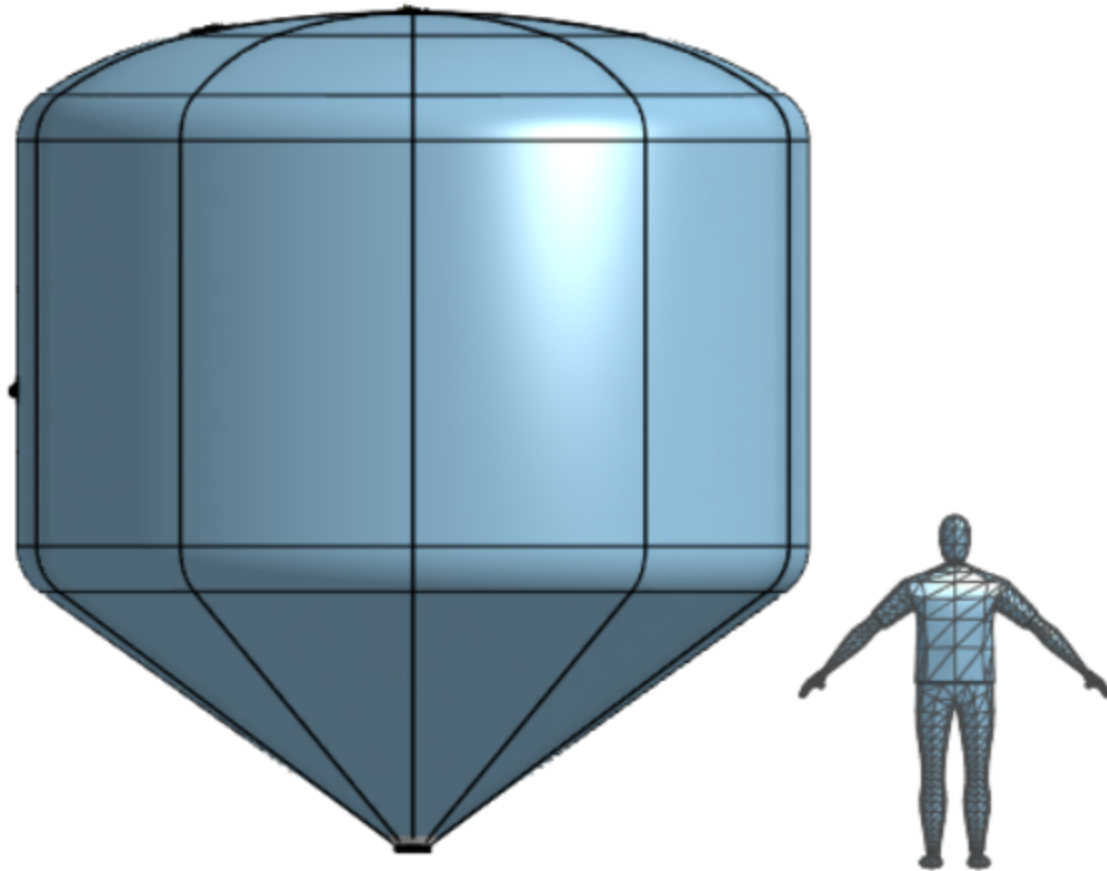


USKY-10-050-3.3

Patents issued and pending

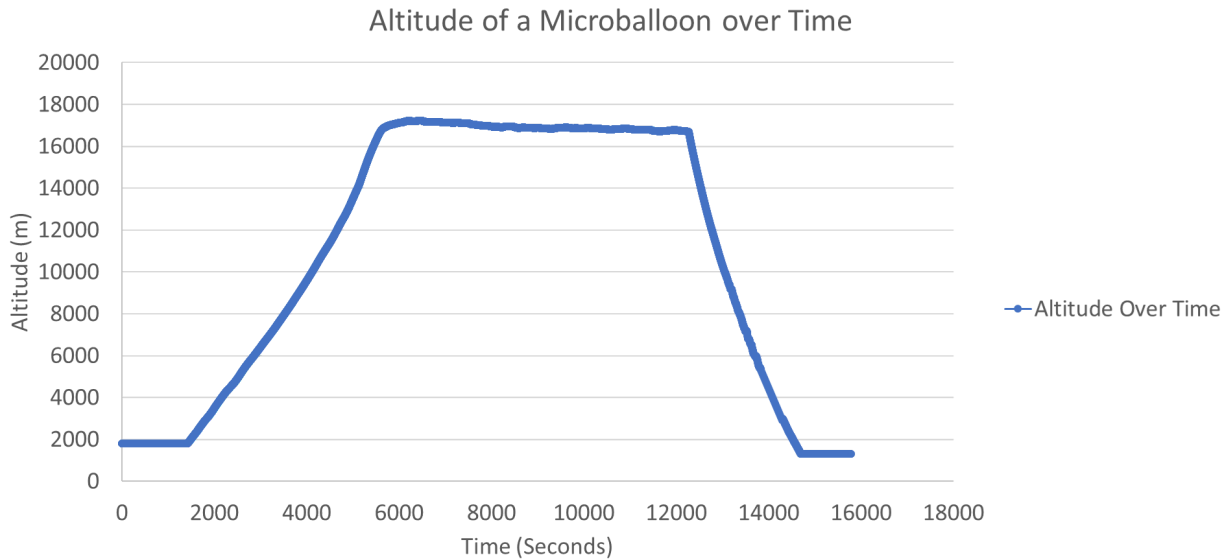
Specifications

- Fully Inflated (maximum) volume: $50m^3$
- Lift capacity: $2.0Kg(min) - 6.0Kg(max)$
- Gore length (uninflated length): $7m$
- Number of Gores: 10
- Float Altitude: $15,500m - 19,500m$
 - Float altitude depends on lift gas type and hook-on mass
- Total balloon system mass (not including payload): $2.6Kg - 3.1Kg$
- Fully Inflated Width: $4.3m$
- Fully Inflated Height: $4.5m$

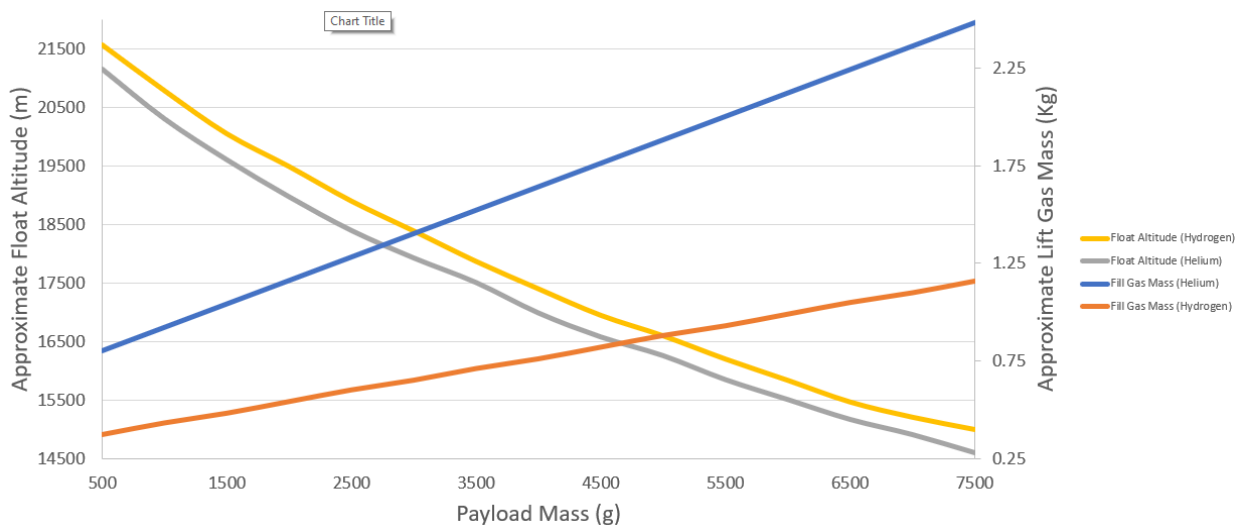


- Command and control capabilities:
 - Live tracking
 - Remotely commanded termination
 - Remotely settable geofence (redundant systems)
 - Live health monitoring including alerts
- Compatible lift gasses: Helium, Hydrogen*, Trimix 90 (90% Helium, 7.5% Argon, 2.5% CO₂)
 - *Hydrogen is a dangerous flammable gas and precautions should be taken to avoid air mixing and ignition sources
- Altitude stability performance: $-0.1m/s$ – $-0.5m/s$
 - The expected rate of altitude loss at float for a new envelope

- See a typical altitude profile below



- Max achievable float altitude and required lift gas:
 - These values depend on hook-on mass. See a chart below showing achievable float altitude and how much lift gas is required for various hook-on (payload) masses.



- Mechanical interface: Urban Sky balloons come with a standard mechanical interface as shown in the interface control document below.

