

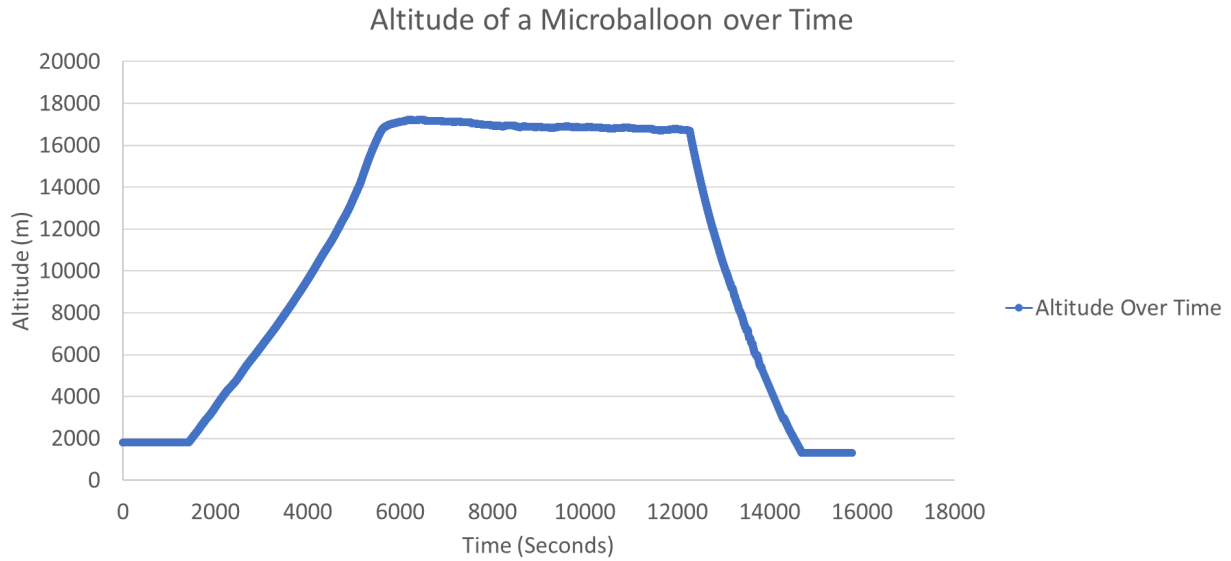
USKY-12-85-3.2

Patents issued and pending.

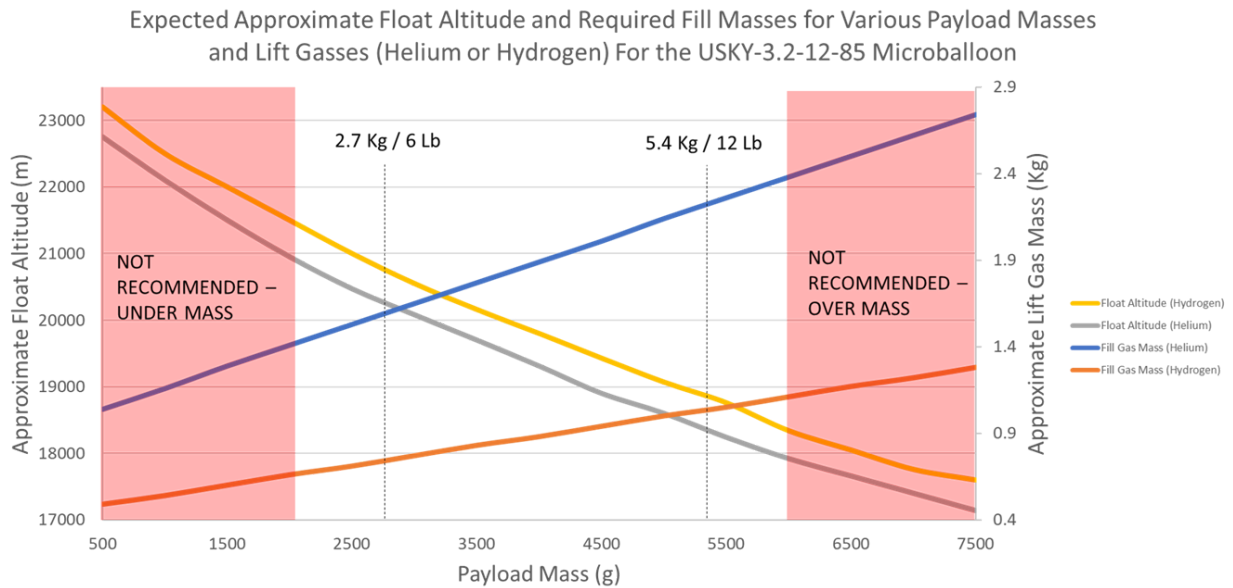
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Specifications

- Fully Inflated (maximum) volume: $85m^3$
- Lift capacity: $2.0Kg(min) - 6.0Kg(max)$
- Gore length (uninflated length): $9m$
- Float Altitude: $18,000m - 21,500m$
 - Float altitude depends on lift gas type and hook-on mass. See chart below.
- Total balloon system mass (not including payload): $3.8Kg - 4.2Kg$
- Fully Inflated Width: $5.1m$, Height: $5.5m$
- 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 should only be used by experienced operators taking appropriate precautions 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 for various payload masses:



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

