Deployable High Gain Antenna For Small Satellites

- 3U Form Factor
- >50 dBi Antenna Gain
- Offset Fed
- Multiple Horn Option

Key Features

- Effective aperture = 1m (Baseline design)
- Directivity = 50 dB at 36 GHz
- Mass = 2.5 kg (reflector, boom and feed)
- Packaged volume = 3U (10x10x30cm)
- Offset fed, f/D = 0.75
- Multiple feed options
- Scalable to 2-4m apertures
  - Can be center fed
- Applications
  - RF Communications
  - Active radar (weather, SAR)
  - Radiometer (ocean surface winds)
- Engineering unit with mesh completed
  - Packaging, deployment, surface repeatability shown
- Proto-Flight completion November 2017
  - Deployment repeatability testing
  - RF testing at 35.75 GHz
- Patent Pending
About Tendeg

Tendeg LLC provides antennas, precision deployable structures, and mechanical engineering design and analysis services for space missions. The company was founded in 2015 by a group of space industry veterans with an average of 22 years experience in designing and building space flight hardware. Tendeg has offices near Denver, Aspen, and Los Angeles.