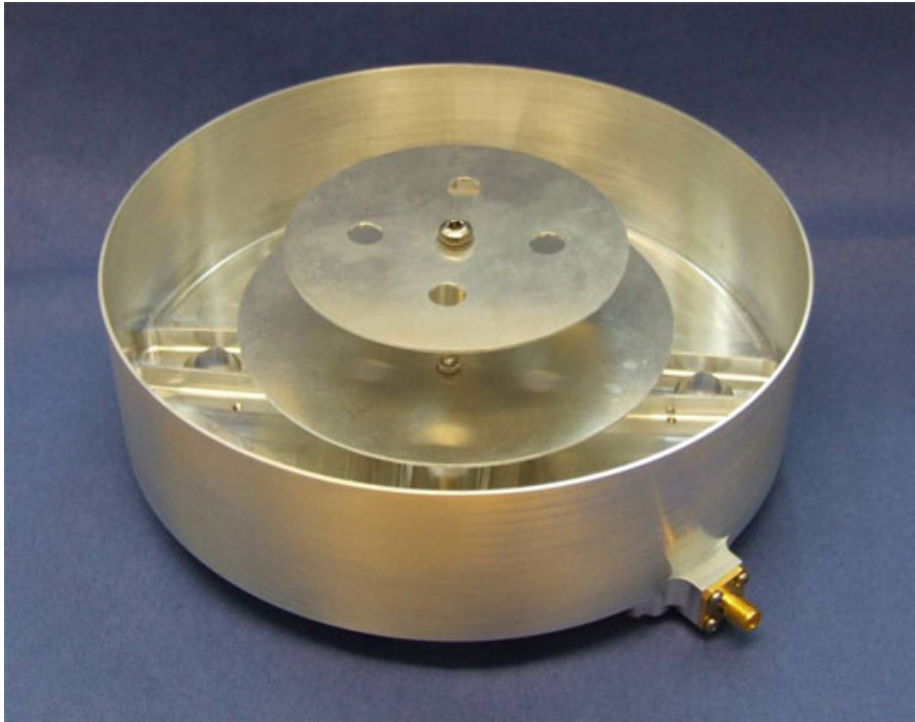


GPS satellite antenna

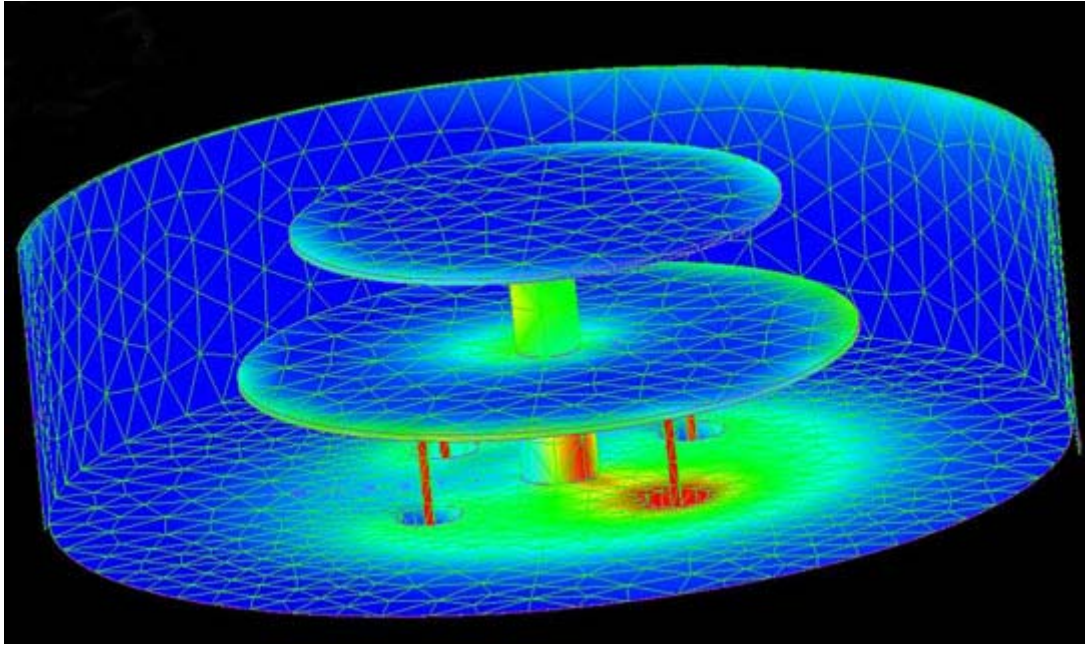


The SWARM GPS antenna. Courtesy of SAAB Space AB, Sweden.

The SWARM GPS antenna. Courtesy of SAAB Space AB, Sweden.

The satellite antenna consists of two patches, placed in a circular cup. The antenna is covering the two GPS bands using a four-point feed connected of the bottom patch. The limited allowed size, 160 mm diameter and 55 mm height, makes this design a challenge, in particular for the lower frequency band.

- Excitation with four waveguide ports
- RHCP
- 1.2-1.6 GHz
- Number of elements = 4602
- Number of unknowns = 6903



Surface currents and meshing