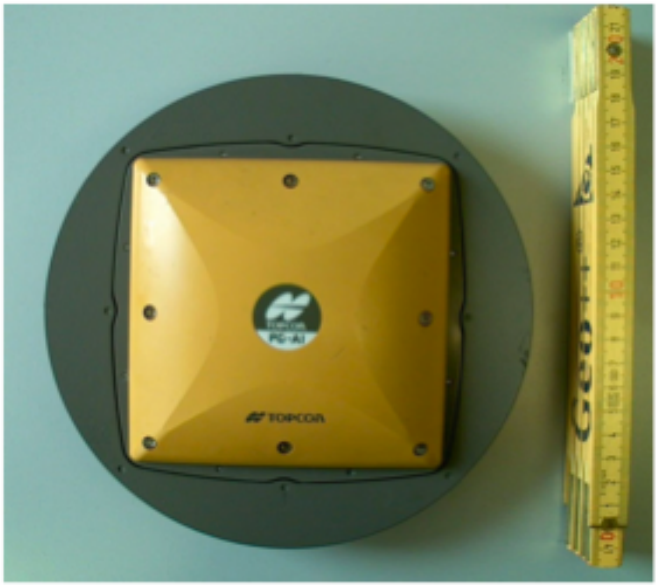
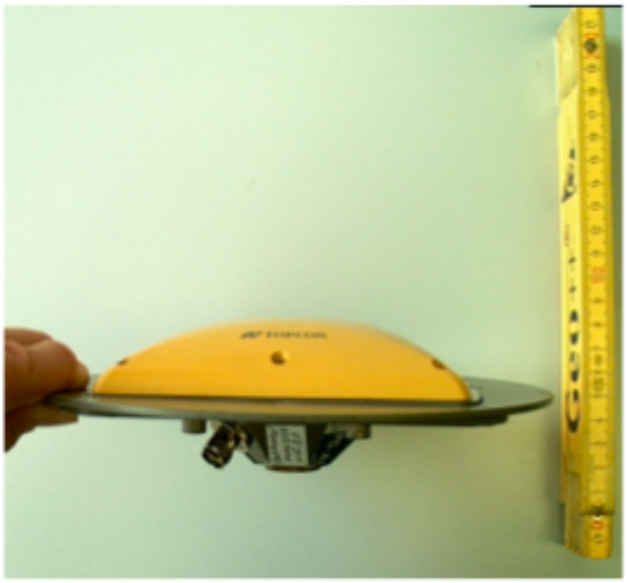
Topcon PG-A1 w/Ground Plane Antenna Phase Center Calibrations

709 Freddy Blume April 28, 2011 Topcon PG-A1 3239

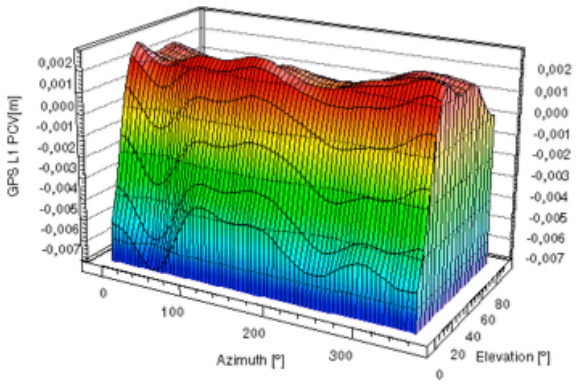
The Topcon PG-A1 with Ground Plane is the standard antenna distributed with UNAVCO's EarthScope Topcon GB-1000 campaign systems (IGS designation: TPSPG_A1+GP)

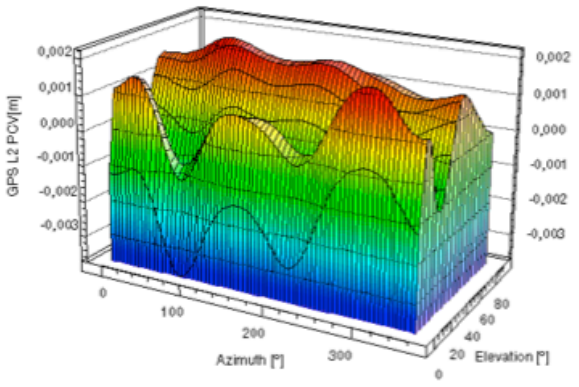




The original calibration published by the National Geodetic Survey in 2004 were found to introduce large errors in processed positions; these values should **not** be used. A recalibration of the same individual antennas and four additional newer units was done at the NGS in 2009 and new results published using the designation TPSPG_A1_6+GP (referring specifically to part number 01-840201-06). All users of UNAVCO's PG-A1 antennas should use the newer NGS results if relative phase center calibrations are desired.

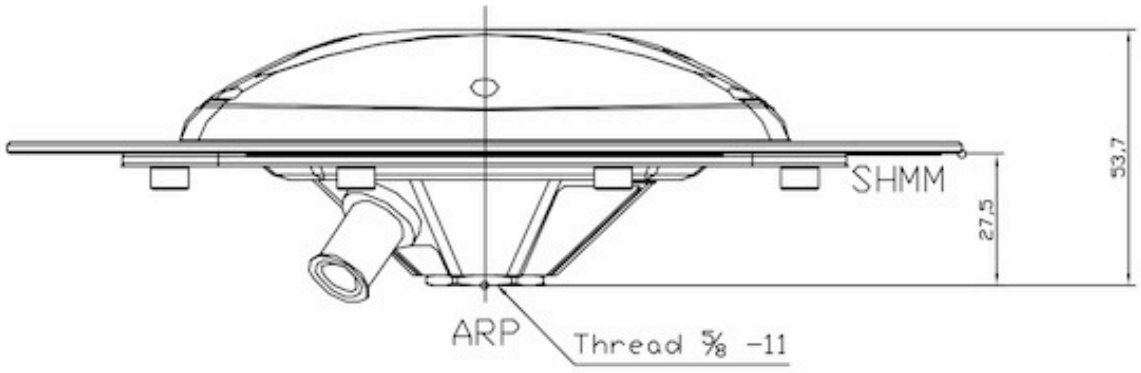
In 2010 Absolute Phase Center Calibrations for both GPS and GLONASS were performed at the Geo++ robot facility in Hanover, Germany, and the type-mean results have been made available to the public by Topcon. These are the preferred PCV's for use in the majority of high-precision GPS and GNSS.



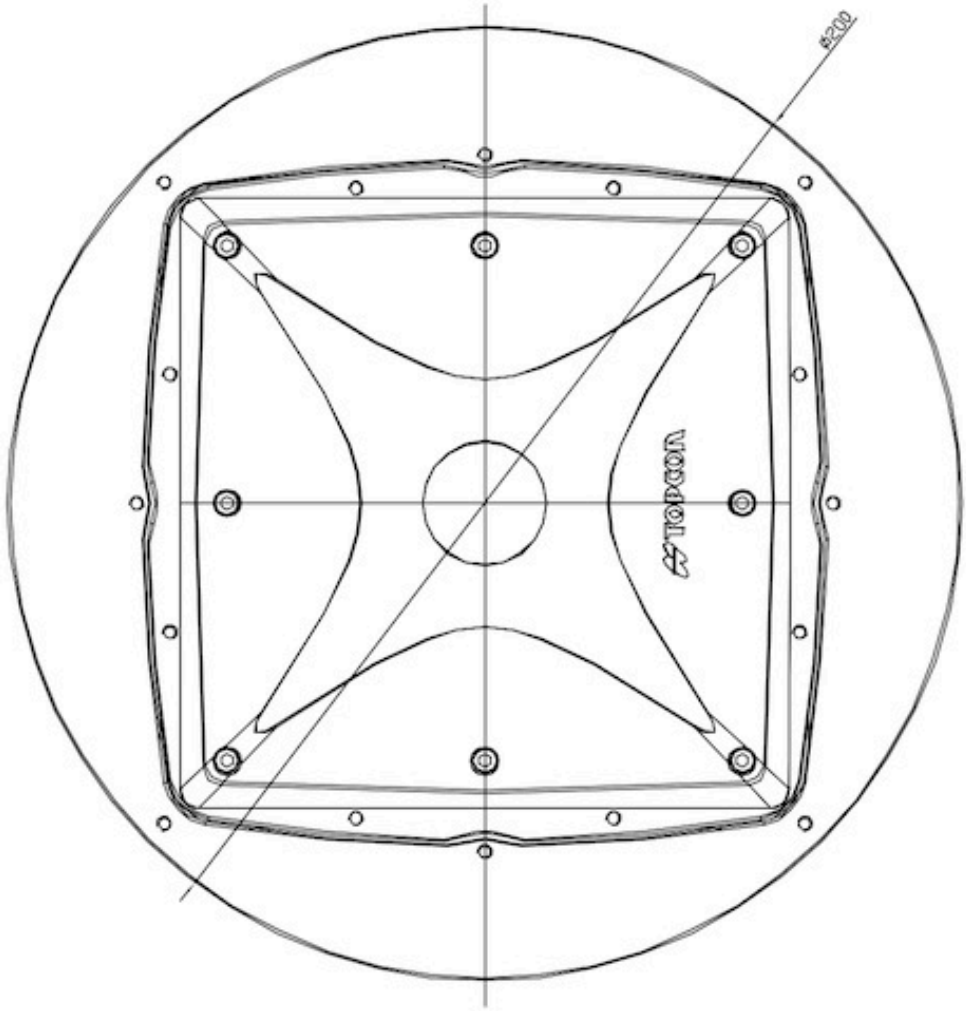


The values will be included in an upcoming revision of the igs08.atx file. Users may download the attached detailed calibration report from this link, and the Antex format azimuth- and elevation-dependent PCV file from this link. Values in .ant and .ane formats are also available.

The Topcon specification sheet is available from their website, and the detailed dimensions of the antenna are shown below.



Dimensions are in mm
ARP - Antenna Reference Point
SHMM - Slant Height Measure Mark



Online URL:
https://kb.unavco.org/article/topcon-pg-a1-w-ground-plane-antenna-phase-center-calibrations-709.html