

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

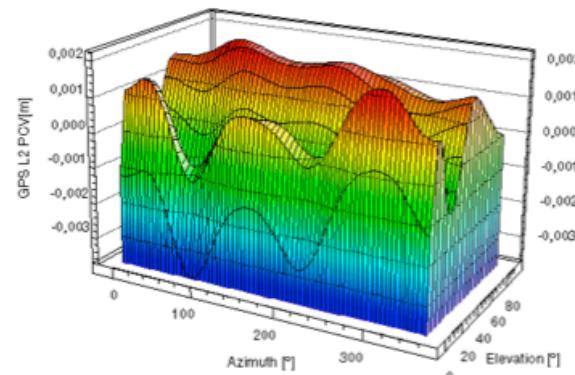
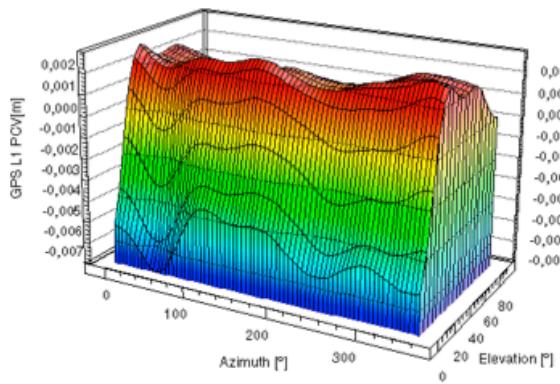
709 Freddy Blume April 28, 2011 [Topcon PG-A1](#) 2242

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)



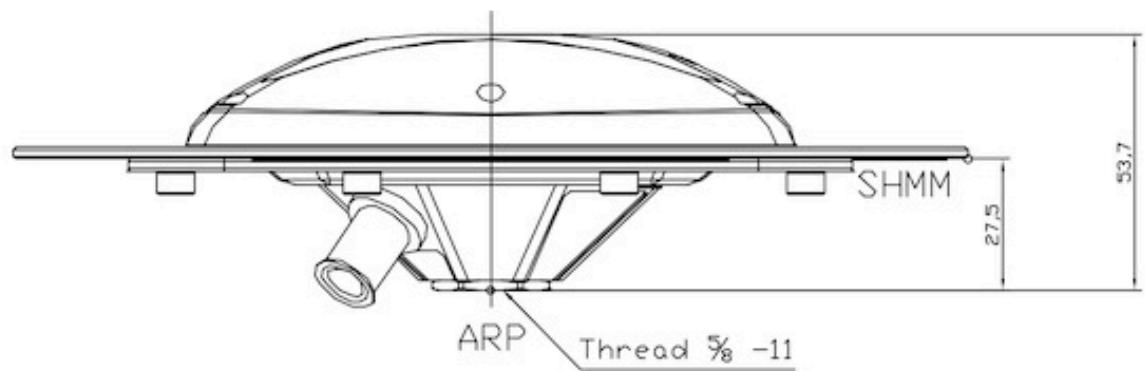
The [original calibration published by the National Geodetic Survey in 2004](#) were found to introduce large errors in processed positions; these values should **not** be used. A recalibration of the same individual antennas and four additional newer units was done at the NGS in 2009 and [new results 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.

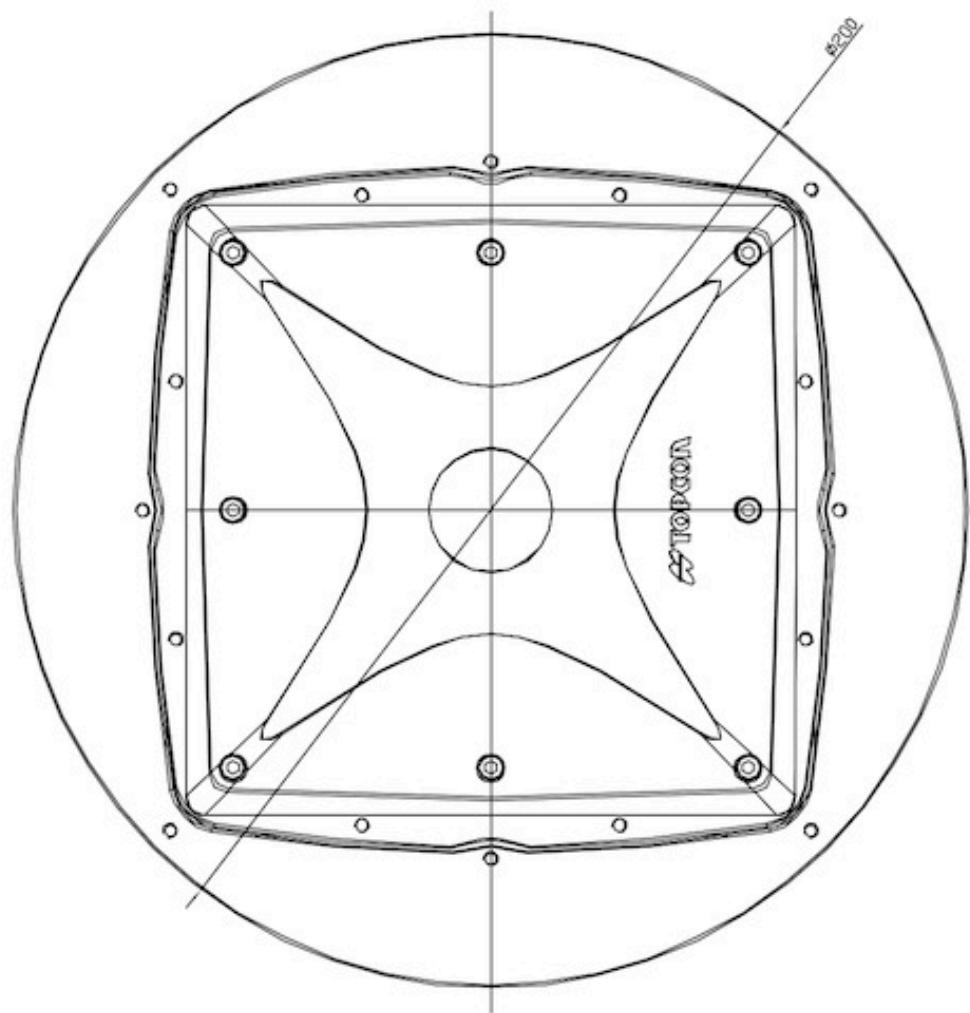
The [Topcon specification sheet is available from their website](#), and the detailed dimensions of the antenna are shown below.



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>