iG9 Antenna Model in SurvPC

Date: 8 October, 2021

Thesis

The default antenna model in SurvCE/PC does not include the radius or SHMP for the iG9 so it is not possible to use a Slant Height. This document shows how to add a custom antenna type to SurvCE/PC.
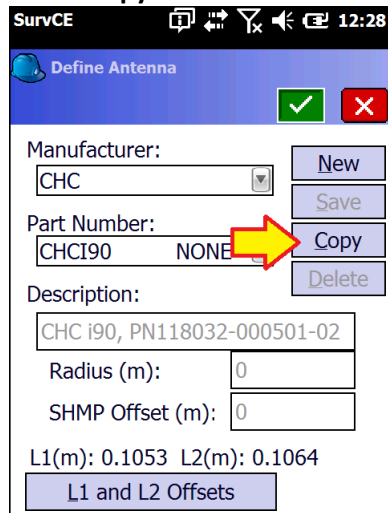
Solution

The default NGS Absolute Antenna calibration does not include a Radius or SHMP offset.
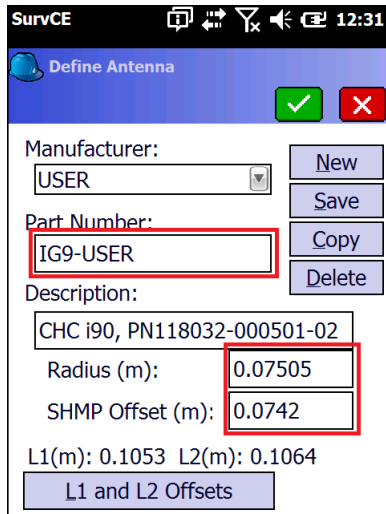
If you plan on using a 'Slant' measurement, you will need to edit the antenna model and enter the device radius and SHMP. On the 'Receiver' tab of the Base or Rover setup, click the antenna button:
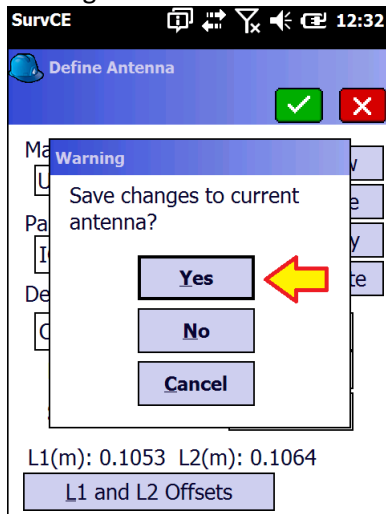
Next click the '**Copy**' button:

Change the '**Part Number**' to '**IG9-USER**':

Enter the **Radius** and **SHMP** Offset as shown above.
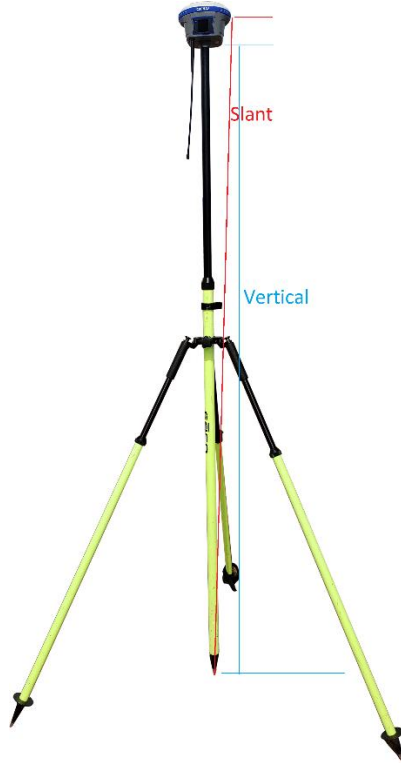
Then click the green check mark.


Click on '**Yes**'.

A new antenna model is now available that includes the information required to use Slant antenna height measurements.

Enter the correct '**Antenna Height**' (the distance from the Ground Mark to the receiver head.)

If the Base receiver is mounted on a fixed height pole, select '**Vertical'** and enter the vertical distance from the Ground Mark to the bottom of the antenna as shown in **blue** above.

If the Base receiver is mounted on a tripod and you can't make a direct vertical measurement, select '**Slant'** and enter the slanted tape distance from the ground mark to the bottom of the blue band that separates the white top from the gray bottom as shown in **red** above.
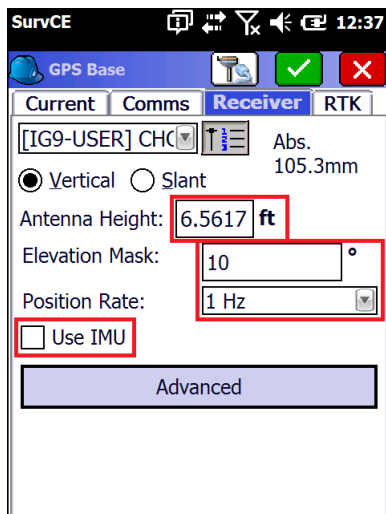
If the receiver is mounted on a fixed height metric tripod or pole, you can enter the '**Antenna Height**' in meters followed by 'm' and it will be converted to the current job units.
Set the '**Position Rate**' at 1 Hz for a Base and 5 Hz for a Rover.
Uncheck the '**Use IMU**' (Tilt / Heading Compensation) for a 'Base' receiver or an iG9a (without Tilt).