Tutorial: Antenna height measurement

The aim of this tutorial is to describe the antenna height measurement modes then the antenna settings in Stonex Cube-a v4.3.

Base configuration

The following picture (Figure 1) shows the Base configuration and the available antenna height measurement modes.

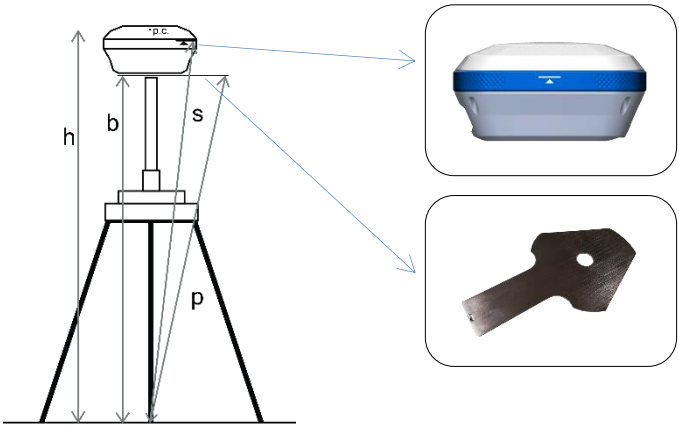

Figure 1: Base configuration

Here below the description of the antenna height measurements shown in Figure 1:

- **h**: vertical height to phase center
- **b**: vertical height to receiver bottom
- **s**: slant height to altimetry line
- **p**: slant height to altimetry plate

To set the Base antenna height in Stonex Cube-a, connect to the receiver via Bluetooth then click on Device – Working Mode – Base.

Select the option "Input Base Coordinates" and click on "Set Base antenna height". In the "Antenna Parameters" page, shown in Figure 2, select the measurement type you want from the dropdown menu and type the measured value in "Measured Height".

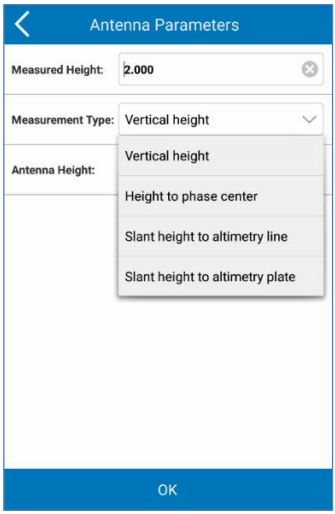

Figure 2: Base antenna parameters

Measurement type in Figure 2, referring to Figure 1, are the following:

- Vertical height: b
- Height to phase center: h
- Slant height to altimetry line: s
- Slant height to altimetry plate: p

In the “Antenna height” field will appear automatically the antenna height obtained by the sum between the measured one and the respective distance from the phase center.

Rover configuration

The following picture (Figure 3) shows the Rover configuration and the available antenna height measurement modes.

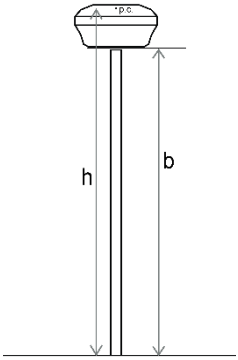

Figure 3: Rover configuration

Here below the description of the antenna height measurements shown in Figure 3:

- **h**: vertical height to phase center
- **b**: vertical height to receiver bottom

To set the Rover antenna height in Stonex Cube-a, connect to the receiver via Bluetooth then click on Device – Working Mode – Rover.

In the “Rover mode settings - Antenna Parameters”, shown in Figure 4, select the measurement type you want from the dropdown menu and type the measured value in “Measured Height”.

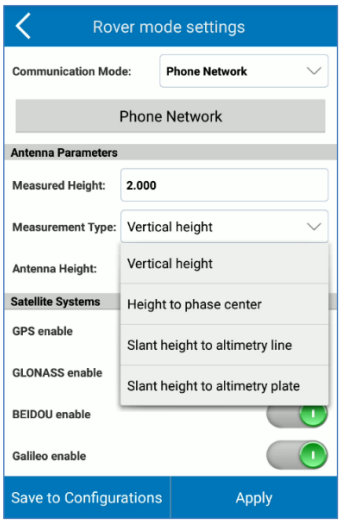

Figure 4: Rover antenna parameters

Measurement type in Figure 4, referring to the Figure3, are the following:

- Vertical height: b
- Height to phase center: h

In the “Antenna height” field will appear automatically the antenna height obtained by the sum between the measured one and the respective distance from the phase center.

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