



Which GPS is the best for your study? GiPSy-4 or GiPSy-4 SB?

Our GPS come with two different boards, the GiPSy-4 that can mount two kinds of antenna (chip and whip) and the GiPSy-4 SB that can only mount the ceramic antenna.

The two models have similar performances on land, but their performances on water are different and knowing their difference may determine the success of a field study.

Here a short list of pro and cons of these three antennas:

GiPSy-4

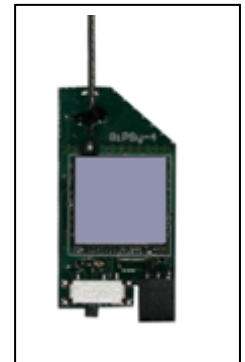
Chip antenna

The chip antenna is the smallest and lightest (<0.1g) and has a very good reception in open field conditions. In conditions of bad signal (e.g. woodland), this antenna is outperformed by the two other antennas, although it shows very good satellite reception even in relatively closed environments. Furthermore it is not recommended to use this antenna on seabirds that usually fly or rest close to sea surface, such as shearwaters, albatrosses and ducks. In these cases, the ceramic antenna is highly recommended. For those seabirds that do not fly low on the water such as gulls, fregates or terns, it can be used without problems. Due to ground issues, the battery must not be placed below the antenna, resulting in relatively elongated GPS, compared to the other two antennas.



Whip antenna

The whip antenna is very light (<0.2g), but it protrudes about 4cm from the GPS. For this reason, it is recommended for larger animals (>150g) that can fit such long instruments. Furthermore, although it has an average reception on water, it is not recommended to use on aquatic animals, because of the total length of the necessary waterproof encapsulation and because of the risk of water leakage in the area of the antenna. It can be juxtaposed on the battery, similar to the ceramic antenna, making the whole system relatively compact, except for the protruding antenna. This antenna is recommended for places with bad satellite reception and is the only one to be used in collars.



GiPSy-4 SB

This GPS is especially designed for best performances on water. It has the best reception on water, with very fast time to fix, allowing to use smaller batteries, compared to the other two antennas. The ceramic antenna is the heaviest of the three antennas, and the GPS weigh 5.5g without battery. The battery can be placed directly below the gps, making a very compact and mechanically resistant GPS. The GiPSy-4 SB is recommended for seabirds such as shearwaters or albatrosses thanks to its high performances on water and to its compact size, that allows easy encapsulating in a waterproof case.

