

VERTEX PLUS Survey

Ultra low cost GPS GLOBALSTAR Satellite collar

The VERTEX PLUS Survey collar has been designed for long-term survey and survival studies with regular GPS data updates using GLOBALSTAR satellite communication at a very economical price.

The VERTEX PLUS Survey collar takes up to two GPS fixes per day and sends you daily updates about your study animals location, if it is still alive and also data about ambient temperature and activity level.

Survival Studies

The VERTEX PLUS Survey collar is equipped with a mortality sensor. If no activity or movement is detected for a user-defined period of time, the collar will:

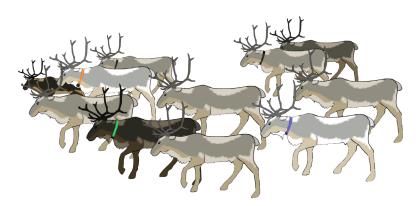
- send an alert message using GLOBALSTAR satellite network to your email address*
- switch to mortality GPS mode by recording positions every 30 minutes for 6 hours (12 GPS locations and GLOBALSTAR messages) before it returns to regular GPS schedule
 - * optionally you can receive a text message alert (SMS) to your mobile phone at additional cost.

round shape collar





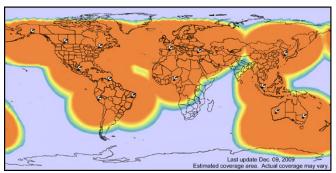




www.vectronic-aerospace.com

GLOBALSTAR Satellite Communication

The VERTEX PLUS Survey Collar uses the GLOBALSTAR Simplex service for remote data download. GPS and Mortality Data are sent repeatedly to increase probability that the message is received by the satellites. The data are transferred to your computer as email or can be downloaded automatically using the http collector with GPS PLUS X. Please check the map for coverage in your study area.



GLOBALSTAR coverage map (Dec 2009)

Longevity, Reliability and Flexibility

The VERTEX PLUS Survey Collar is designed for very long study periods and will last for several years without the need to change the battery. GPS locations and GLOBALSTAR updates have only a small impact on the lifetime and are meant to give you a starting point for your field trips.

The electronics and the battery are completely sealed in one housing maximizing the reliability in the field. It is very robust towards mechanical damage but also able to withstand harshest environmental conditions for a very long time. The VERTEX Survey collars offer a very large length adjustment range without compromising the GPS performance. They can be fitted on a variety of species and different specimen without having to worry about the exact neck sizes.

Programming

The VERTEX PLUS Survey Collar is shipped fully programmed as a part of our service. Programming includes:

- GPS schedule (up to two positions each day)
- Mortality period

Technical Data

Weight: 340g + belt

Weight Example: 470g for a 65cm belt

Dimensions: case: $85 \times 59 \times 68 \text{ mm}$ Belt width: 25, 32, 38, 50 or 75 mm

Belt thickness: 2.5, 3.8 or 5 mm

Belt size: 30 - 300 cm

Belt colour: black

Any other colour and reflective material at additional costs

Temperature range: -40°C to +70°C

Lifetime at 0°C: 5.7 years

- 1 GPS fix per day

Lifetime at 0°C: 4.0 years - 2 GPS fixes per day