

# GPS PLUS Handheld Terminal



The GPS Plus Handheld Terminal provides the wireless radio interface between a PC and the GPS-Plus collar.

It is used to

- download GPS data sets from the GPS PLUS collar (standard or differential data sets),
- download high resolution activity and temperature data sets from the GPS PLUS collar,
- download mortality data sets from the GPS PLUS collar,
- download telemetry (status) information from the GPS PLUS collar,
- upload UTC time and date to the GPS PLUS collar,
- upload new GPS scheduler to the GPS PLUS collar,
- upload new UHF beacon scheduler to the GPS PLUS collar,
- upload new VHF beacon scheduler to the GPS PLUS collar,
- activate the powerful UHF beacon, in the field.

A built in 12 channel GPS receiver gives you important information about your position in the field. With the assistance of an integrated electronic compass and the internal GPS receiver it is now very easy to find the tracked animal. The "Range Checker Mode" opens unbeatable support in finding the direction and distance to the collar. The GPS and compass information will be used to calculate and display azimuth and elevation (direction) and the distance with an accuracy of some meters to your collar.

The communication range is dependent on the receiver antenna gain, the humidity, the kind and density of the vegetation, the height above the ground of both the transmitter and the receiving system, the topography and the configuration between transmitting and receiving antenna. For that reasons the range can vary from several hundred meter to several kilometre. Under normal conditions, the range is several kilometre with a small handheld yagi antenna.



## Specifications

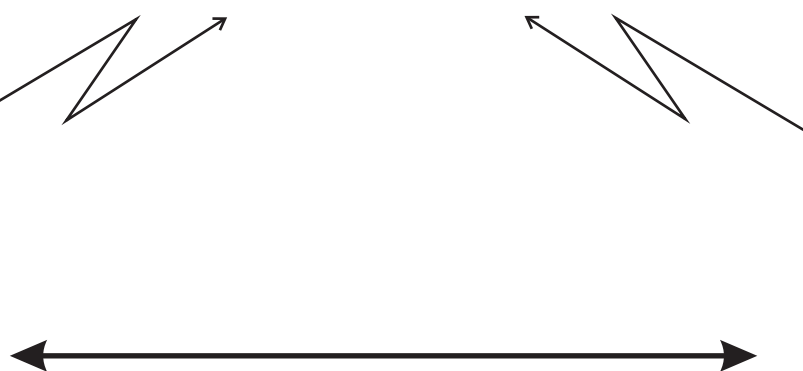
Size	204 x 110 x 41 mm <sup>3</sup> without UHF antenna connector
Weight	550 g
Keyboard	21 keys membrane keypad
Display	128 x 64 Pixel Matrix display with LED background illumination
Memory capacity	512 MByte (data storage for up to 60 collars), Up to 8 GByte with extended memory 315520 Temperature and activity data sets per collar 65536 GPS data sets in non differential mode per collar 24576 GPS data sets in differential mode per collar 4 Mbyte additional sensor memory per collar, e.g. for additional 131072 GPS data sets in non differential mode per collar
Battery	Internal rechargeable Li-Ion battery 3.6 Volt / 6000 Ah
Charging time	less than 8 hours typ.
Operating time with charged battery	Dependent on operation mode (70 hours GPS mode, 75 hour receive mode)
External power supply	Only needed for charging the battery 12 Volt, 800 mA max.
Interface	Serial Interface 115200 baud 8N1 (to be connected to LM1 Link Manager), USB up to 8 MBit/s
Ingress protection	IP65
GPS Receiver	Internal 12 Channel GPS receiver with active antenna
UHF frequency	420 - 460 MHz or 800 - 950 MHz (factory settings)
Output power	0 - 1 W (factory settings)
Modulation	FM
Antenna impedance	50 Ohm
Compass module	Built in electronic compass with tilt compensation, resolution 1 mgauss, range 1 gauss
Operating temperature:	0°C...+50°C (charging), -20°C...+60°C (non charging)
Storage temperature:	-40°C...+80°C



**Handheld**



**GPS PLUS Collar**



**Wireless bi-directional data**