



# The DP GPS



Image above shows the DP GPS DME module on the DP II terminal com-port. Use with the DP GPS, the DP Postex and the DP DME modules. All functions are software run.



Haglöf Sweden's DP II caliper works with different software-run add-ons and accessories, designed to improve accuracy, efficiency and versatility. With add-on instruments mounted on the DP caliper com-port, battery and display are supplied from the caliper.

The DP GPS module enables you to position and navigate with your computer caliper as you are performing your regular fieldwork. The DP GPS is attached to the host computer and becomes an integrated part of your caliper. The module is controlled through the DP caliper, runs with its battery, display and processor, and leaves you with less worries about charging time, connectivity and compatibility.

The DP GPS has a 33-channel high-sensitivity receiver that supports several satellite systems such as GPS, Glonass, Galileo and GZSS. The ability to use several satellites from different systems at the same time improves positioning in difficult terrain. The built-in real time correction allows for accuracy down to 2.5m/8.19ft in open terrain. Algorithms can predict satellite positions for up to 3 days, using data from last used satellite constellation saved for up to one month in the GPS with a built-in rechargeable battery.

Depending on software application in your DP II computer caliper there are numerous ways to integrate the DP GPS module in your field cruising routine. Collect measuring data and connect with positions on sample plots, stand areas, areas with special biotops, individual trees, and roadside timber loads. Make a tracking log of borderlines in a plot and have the DP caliper calculate the total area. Preload positions for marked trees and hazard trees and navigate straight to them. Revisit an area, and instantly find your way. With all field data registered, collected and available in one secure place in your DP computer caliper, no additional instruments or field computers are needed. With the DP caliper and DP GPS module you can save time and ensure compliance. The GPS module is very small and will not affect balance and weight of the DP II caliper when attached. Also available as a combination module including DP GPS and DME for efficient ultrasound distance measuring in sample plots.

## TECHNICAL SPECIFICATION DP GPS

Dimensions:	57x30x30mm/2.28"x1.2"x1.2"
Weight:	25g/1oz
Satellite systems:	Host-based multi-global navigation: GPS(Usa)/GLONASS (Russia)/Galileo(EU)/QZSS(Japan). SBAS Satellite-based augmentation systems: WAAS(USA), EGNOS(EU), GAGAN(India), MSAS(Japan)
Orbit prediction:	Built in self-generated (Faster TTFF up to 3days)
Serial interfaces:	UART 115200bps, 8bits, no parity, 1 stop bit. 3D-FIX Led
Geodetic date:	WGS84
Protocol:	NMEA. Messages: GGA: Time, position and fix type data. GLL: Lat, long, UTC time of position fix and status. GSA: GNSS receiver operating mode, satellite used and DOP values. GSV: Number of satellites in view ID numbers, elevation, azimuth and SNR values. RMC: Time, date, position, course and speed data. VTG: Course and speed information relative to the ground
Performance data:	Receiver type 33 tracking/99 acquisition- channel GNSS receiver. Update rate 1Hz (max 10Hz).
Sensitivity:	Tracking: -165 dBm-. Reacquisition: -160 dBm Cold starts: -147 dBm. Time-To-First-Fix: (All SV @ -130 dBm) Cold starts: 28s up to 15min (open sky). Warm starts: 26s (open sky). Hot starts: <1s (open sky), <2h since last start
Accuracy:	Automatic Position. 2.5m CEP (circular error probable) (50% 24 hr static, -130dBm)
Speed:	0.1m/s. (50%@30m/s)
Temperature:	-40° ~+85° C
Electrical data	Power supply 2.8~4.3V. Power consumption @ 3.3V (typical) Acquisition: 35mA. Tracking: 30mA. Backup:14uA
Other:	Built in jamming removing. Built in rechargeable backup memory. DP II requires Bios V2.16 and forward. Digitech Professional I requires Bios V1.73 and forward. For details on the DME function in DP GPS DME, please see product info for DP DME.

**DP GPS** 13-600-1081 module only, blue. 13-600-1082 DP GPS DME combination, module only, blue/black. (Image to the right is a DP GPS DME.) The DME function is used with T3 transponder and monopod staff, please see product information on DP DME. Functionality of modules is software run through the DP II computer application.

