



# The Vertex IV

- Proven accurate & reliable ultrasound technology
- Durable, rugged and reliable
- Aluminum housing and sealed electronics
- Audible beep signal
- Excellent to measure radius in sample plots
- Built-in BAF (point sampling/reverse prism) functions
- Compensated values to measure in steep terrain and in slopes
- Built-in Bluetooth® and IR
- Low battery consumption
- Reference users worldwide

The Vertex IV is used to measure heights of standing objects, and most often trees. The instrument system will also give accurate measurement information on distance, horizontal distance, angle and inclination. The Vertex instrument ultrasonic measuring technique can be operated in areas with dense terrain and thick undergrowth, where conventional methods such as measuring tapes, laser instruments and mechanical height measurers are difficult to use.

The Vertex IV instrument has aluminum housing, sealed electronics and a large, easy-to-read alphanumeric display. A built-in tilt sensor allows for exact height measuring in slopes or on hills. Infrared and Bluetooth® transmitters enable direct transfer of measurements to unlimited peripheral devices. Measure distances up to 30 meters with multiple heights per object, sample plot radius, limiting distances and diameters for BAF point samples and more.



Ultrasound is a well proven technique that works for measurement work in the forest. The Vertex IV uses ultrasound to measure distances. Unlike measuring tapes and laser instruments, ultrasound works when the reference point is obscured and covered by shrubs, branches and leaves.



To define a reference point in a secure and reliable way, the Vertex IV works with the transponder T3. The Vertex IV communicates with the transponder. This communication eliminates in an efficient way any mix-ups of signals from other instruments or places (echoes). The reference point, i.e. the T3, is used as a sight mark for height measuring and can be placed at optional heights, where visibility is the best in for example thick vegetation. The reference point height (T.HEIGHT in Vertex instrument setup) is set in a special menu in the Vertex instrument and automatically added to the measured height.



## TECHNICAL SPECIFICATION VERTEX IV Bluetooth®

Size:	80x50x30 mm/3.2x2x1.2"
Weight:	160g/5.6 oz (incl. battery).
Battery:	1 x 1,5 AA alkaline, Current 20mA with Bluetooth 150mA.
Temperature:	Min -15° Max 45° C / Min 5° Max 113° F.
Wireless interface:	Bluetooth 1x or IR.
Signal:	Built-in loudspeaker.
Ultra sonic frequency:	25 kHz.
Height:	Min 0 Max 999 m/Yds. Resolution: 0.1 m/ 0.1 ft.
Angles:	-55° to 85°/-60° to 94° Resolution: 0.1°.
Distance:	30m/98ft or better. With 360° adapter 20m/60ft or better. Resolution: 0.01 m/ 0.1 ft. Accuracy: 1% or better.
BAF factors:	0.5, 1 to 9 (m <sup>2</sup> /ha) or 5, 10, 15..to 50 (ft <sup>2</sup> /acre).

## TRANSPONDER T3

Size:	Diameter 70mm/2,8"
Weight:	85 g/3oz (Incl. battery).
Battery:	1.5V AA alkaline.
Consumption:	max 9mW.

**VERTEX IV** 15-105-1008 compl. 360° package/set incl. Vertex IV instrument, transponder T3, plot staff and adapter.

15-105-1009 60° package/set incl. Vertex IV measuring instrument, transponder T3.

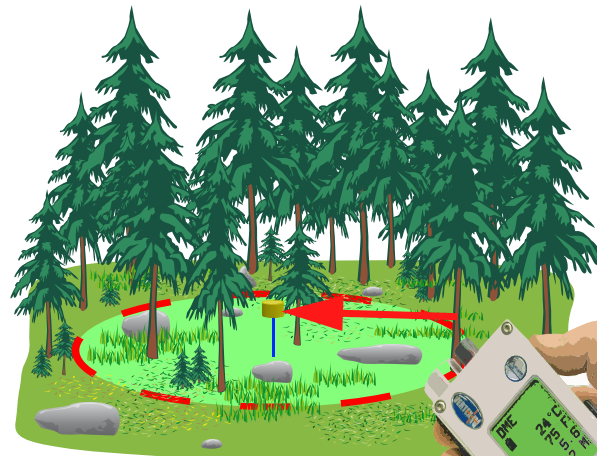
15-105-1010 Vertex IV measuring instrument only.

User instructions included. Aluminum transport case. Measuring instrument and transponder use AA batteries that may or may not be included in the case depending on shipping destination.

The Vertex IV ultrasound hypsometer is a great instrument for measurement work in the forest. The measured angles and distance to the reference point are used to calculate tree heights with great accuracy. The Vertex IV automatically assumes that the measuring object is perpendicularly positioned to the ground. This instrument system is easy to learn and use. It is reliable and accurate, it has been tested, approved and is in operation in forests all around the world.

The built-in BAF (Basal Area Factor) function is useful for cruising with reverse prism with preset basal area factors, when some trees in an area are covered by other, and to control the minimum diameter of border trees when counting stems with a factor gauge.

Data from the Vertex IV is sent through IR or Bluetooth® and results can be stored and processed in the DP II, Digitech Professional or MD II calipers, or other computer.



*The ultrasound signals can be used also when the target is covered by shrubs and undergrowth. Tree heights are calculated as a compensated value with the variables obtained when measuring angle and distance. Use the Vertex IV with the transponder T3 pinned to the tree or mounted on the custom plot staff and adapter.*



**The Transponder T3** is water resistant, rugged and has a simple construction in a bright, visible color. T3 uses one AA battery and it is compatible with Haglöf instruments DP DME, Vertex IV, DME and VL Vertex Laser. The transponder is equipped with a pin to place directly on a tree stem. It can also be used with an adapter and monopod staff to measure in a full circle in sample plot work.

Art. no. Transponder T3 (orange): 15-104-1012. Diameter T3: 70mm/2.8". Weight: 85g/3.4oz. 1 x 1.5V AA alkaline battery, consumption max. 9mW. The custom **Monopod plot staff** is produced in sturdy light-weight, bright blue aluminum material with a pointy end. Art. no. Monopod plot staff: 15-104-1010. Height when assembled 130cm/50.7", weight approx. 240g/9.6oz. The **Adapter** is mounted on the plot staff and allows for measuring in a full 360° circle. Art. no. Adapter 15-104-1011. Plastic, height approx. 47mm/1.88", weight approx. 40g/1.6oz.