

Snow Fork

A portable instrument for measuring the properties of snow

Snow Fork is explicitly designed for field use; it is light, quick and easy to use. It is designed to operate in extreme conditions, ranging from rainy weather to as low as 40 °C below zero.

With Snow Fork you don't need samples and you can remeasure same layers if necessary.

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The sensor is a steel fork used as a microwave resonator. Snow Fork measures the electrical parameters: resonant frequency, attenuation and 3-dB bandwidth.

The measuring results are used to calculate accurately the complex dielectric constant of snow. Further, the liquid water content and density of snow are calculated using semi-empirical equations.

All data will be shown immediately on the display and can be stored in a solid-state memory.

Most tools compress snow.
With **Snow Fork**, the snow can be measured inch by inch.
Snow compresses naturally by wind, changing temperatures, sun, by snowing etc.

There are lots of layers in snow which will be ruined if you have to take samples.

With **Snow Fork** you don't need samples and you can remeasure same layers if necessary.

The measurements are easy to upload to a spreadsheet (f.e. MS excel), where you can create your own diagrams and charts.



- Resonant frequency measurement range: **500 to 900 MHz.**
- Dielectric constant measurement range: **e'; 1 to 2.9, e"; 0 to 0.15**
- Liquid water content measurement range: **0 to 10 vol%**
- Snow density measurement range: **0 to 0.6g/ccm**
- Rechargeable 12V lead battery
- Degree of protection: **IP65.**
- Operating temperature: **(-40) -25...+25°C**, Storage temperature: **-40...+40°C**
- Data transmission: RS232C bus
- Size and weight: Electronics box 18cm x 14cm x 29cm/4200g, fork 380g

