

Peat Probe

A portable instrument for defining the properties of peat and other wet materials with low conductivity

Can measure a peat layer of e.g. 2-3 metres deep, from surface to bottom in a couple of minutes

Calculates the dielectric, the bulk density and the water content of the peat

The measurement is easily repeatable



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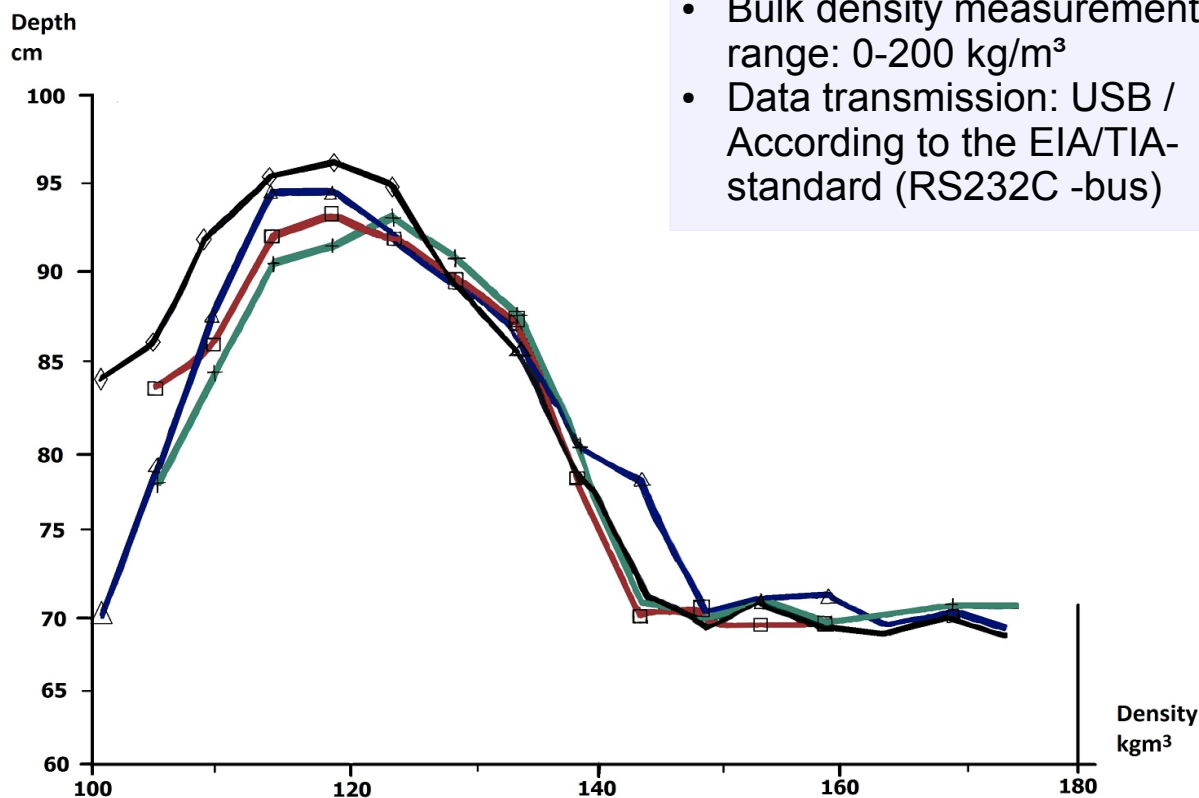
Peat Probe is a quick, reliable and easy to use measuring system for defining the properties of peat. Whereas conventional methods take days, Peat Probe can measure a peat layer of e.g. 2-3 metres deep, from surface to bottom in a couple of minutes.

By recording the electrical parameters of its sensor - resonance frequency, attenuation and 3 dB-band widths - Peat Probe calculates the dielectric constant and, further, the bulk density and the water content of the peat. The results are immediately shown on the LC or LED -display and can be stored in an electrically erasable memory. Afterwards the stored data may be transferred to a normal personal computer and processed with any data processing method if needed.

Peat Probe is equally suitable for measuring the water content of lake sediments, animal slurries or other wet materials with low conductivity. The electrical parameters the device measures are absolute for the measured material.

The calculated density and moisture -values of the Peat Probe are valid when the measured material is peat or some other two-component-material similar to peat.

- Size and weight: Electronics box 18cm x 14cm x 29cm/4200g, fork 380g.
- Resonance frequency measurement range: 100-160MHz
- Degree of protection: IP65
- Rechargeable 2.5Ah /12V lead battery
- OTR: -20...+50°C
- STR: -40...+80°C
- Water content measurement range: 80-100%
- Dielectric constant ϵ' measurement range: 50-90
- Bulk density measurement range: 0-200 kg/m³
- Data transmission: USB / According to the EIA/TIA-standard (RS232C -bus)



The Peat Probe -sensor is a 20 cm long slot located in a metal pipe, 25 mm in diameter. The sensor is simply pushed into the peat layer and activated by pressing a key on the control unit. Measurements are possible down to any depth with the use of additional pipes.

