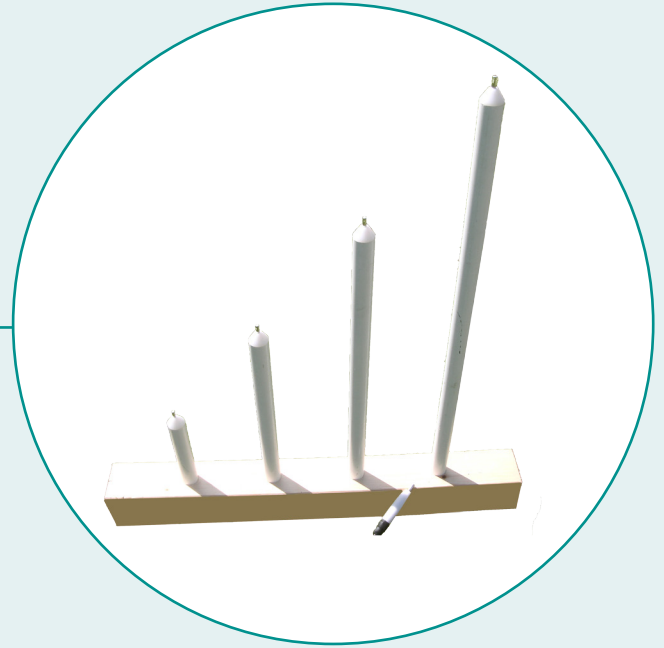
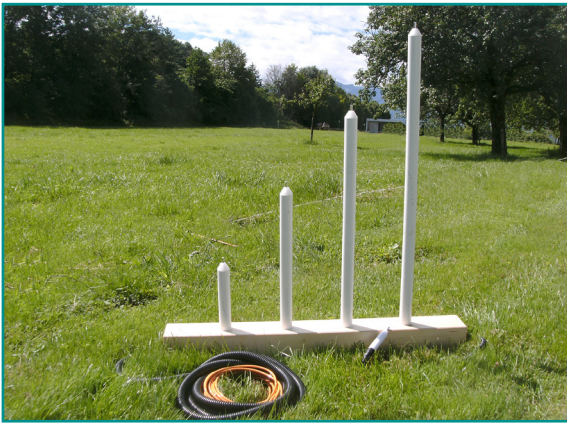


# SCA

Snow Profile Temperature-sensor and Ground Temperature-sensor measure the snow temperature in the different layers of the snow pack.



## Properties and benefits

- » Continuous measurement of snow- and ground temperature in each snow profile
- » Robust construction
- » Low radiation influence by plastic candles
- » Laser-calibrated temperature sensor with impressed current
- » Easy replacement of candles
- » Simple installation

# Snow- and Ground Temperature-sensor

## Description

The snow and ground temperature-sensor is a highly accurate device for measuring the snow temperature in the different layers of the snowpack. Typically, the sensor is placed on the ground. The LWD (Avalanche Warning Service Germany) requires the measured data (combined with other parameters) to assess the risks of avalanches.

## Measurement principle

The snow candle consists of 4 snow temperature-sensors and 1 ground temperature-sensor. This temperature-sensor is placed on the ground in order to measure the temperature changes in the ground. The snow candles are placed on a flat surface. Once the snow candles are snowed up, measurements are possible at any time and at any interval. The detectors are on the top of each snow candle in the heights of 0, 25, 50, 75 and 100 cm. This ensures that the sensor element is always in contact with the snow. The result is a reliable and accurate measurement of the snow temperature. The candles are manufactured of plastic (bad heat conductor), thereby no gap occurs between the candles and the snow.

## Application example

The measuring stations of the Bavaria Avalanche Warning Service are products of Sommer Mess- Systemtechnik. Among others the snow candle finds there its use. The LWD monitors with this snow candle the snow temperature and thereby they get informations about the snow conditions and the possible risks (avalanche danger, etc.).

## Technical Data

General	
Total weight	1,8 kg
Sensor width (mm)	130 mm
Power supply	8 x AA Batteries
Battery life	> 25 h continuous use (alkaline Batteries)
Operating temperature	- 20° ... 50° C
Storage temperature	- 20° ... 50° C
Hand device	Short term submersible up to 1 meter
Position of the measurement volume	10 cm from the transmitter