**The saltiphone is positioned at the right height.**

## Soil moisture

### 14.26.06    Soil moisture sensor

Sensor for measuring the volume percentage of moisture in the soil. The sensor operates according the Frequency Domain principle. Measuring range 5-55% volume percentage moisture, accuracy approximately 5% with standard calibration and 2% with a soil specific calibration.

### 14.04.08    Tensior 3 tensiometer

The Tensior 3 has a measuring range of -100 till +700 hPa and an output signal of -10 till +70 mV (+/- 3 mV). Power supply is 10.6 Vdc and the current consumption is 1.3 mA.

### 14.04.09    Tensior 4 tensiometer

The Tensior 4 has a measuring range of -1000 till + 850 hPa and an output signal of -100 till +85 mV (+/- 3 mV). Power supply is 10.6 Vdc and current consumption 1.3 mA.

### 14.04.11    Tensior 8 tensiometer

The Tensior 8 has a measuring range of -1000 till +850 hPa, temperature range -30 till +70 °C, power supply 6 Vdc, current consumption 7 mA, external refilling, filling status indicator, temperature sensor and amplifier.

### 14.22.05 and 14.27.05   Soil moisture blocks

Respectively gypsum and granular matrix blocks (Watermark) can be used to measure the soil moisture tension.

## Erosion

### 16.98.55    Saltiphone

Sensor for measuring the wind erosion according to the acoustic measuring principle. Dusted grains are counted and the digital output signal is registered by a datalogger. Digital output 0 - 1000 counts/sec. (0-5 V pulse), analogue output 0-1 Vdc, accuracy 5%. Supply 4.8 - 35 Vdc. Current consumption 6 mA. The height of the sensor can be adjusted. Ref. literature: Aeolian environments, sediments and landforms: A.S. Goudie 1999.


Soilmoisture sensor Watermark (14.27.05)
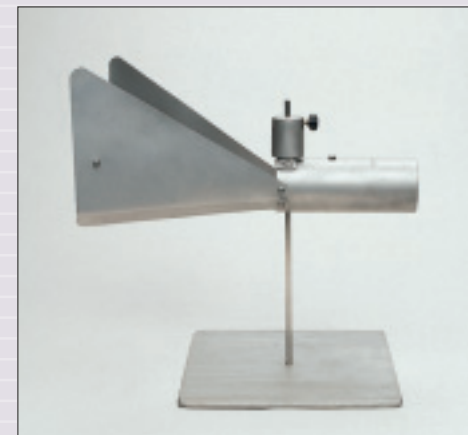

Saltiphone (16.98.55)


Tensiometers Tensior 3 and Tensior 4 (14.04.08 + 14.04.04)

## Water level

### 16.98.25 and 16.98.26  Water level sensors

Water level sensors with ventilated cable. Measuring range 0-500 mbar, 0-5 m water height. Output voltage resp. in 0-1 Vdc and 4-20 mA.

### 16.99.25    Water level sensor

Water level sensor with ventilated cable. Measuring range 0-500 mbar, 0-5 m water height. Output voltage in 0-17.5 mV (at 5 V power supply).

## Solar systems

### 16.99.50    Solar energy system, 1 W

This unit is supplied for use with the automatic agro-meteostation (art. no 16.99). It incorporates a high grade polycrystalline solar cell array (1W), which is capable of powering an meteostation continuously in almost all parts of the globe, except areas towards the poles in winter.
The unit gives an output of 12 Volts and plugs into the automatic Agro-Meteostation via its RS232 socket which is used for configuring and reading out the automatic agro-meteostation when the solar energy system is connected.
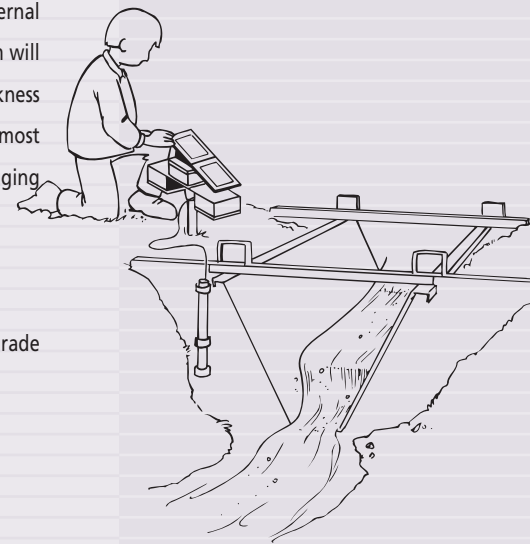
The solar energy system works by charging the batteries that are built into itself when the sun shines, and then using the power stored to supply the automatic agro-meteostation in the dark or on clouded days.
It will charge its batteries when the solar energy level is approximately 80 watts/m² or above. The internal rechargeable batteries of the solar energy system will run an automatic agro-meteostation in total darkness for typically 7 weeks (5 weeks at -20 °C) with most types of automatic agro-meteostations and logging times.

### 16.99.51    Solar energy system, 2 W

Same system as described before with two high grade polycrystalline solar cell arrays (2 W).

**The solar energy system can be used e.g. in remote areas to supply the datalogger.**


Solar energy system

www.eijkelkamp.com