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(ISO 9001:2015 certified)

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Dendrometer

Radius

DR

Radius

DRW

Diameter

DD-S

Diameter

DD-L

Diameter

DDW

Circumference

DC1

**Circumference
DC2, DC3**

Fruit DF

Root/UnderWater
DRO

Vertical

DV

Data
samples

Equitensiometer

Sap Flow

Sensor

SF-G

SF-L

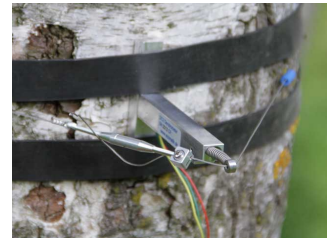
Leaf Sensor

Circumference Dendrometer 2 (DC2) and Circumference Dendrometer 3 (DC3)

The DC2 and DC3 are the improved versions of the DC1. The sensor receives the circumference signal by means of a stem embracing cable wire. The cable wire consists of a special material (purpose specific alloy), with the lowest thermal expansion coefficient available. The elastic force of the sensor is not applied in tangential, but in radial direction (Please note the [essential difference between the various circumference dendrometers](#)). With this physical layout, the pressure of the wire cable to the tree adjusts automatically with the diameter. The data of different tree sizes is comparable. Additionally to the cable wire, the sensor is firmly fixed with two additional weatherproof rubber bands. The slide rings reduce the friction between the wire cable and the tree bark. They also decrease the pressure on the tree.

Advantages

- Suitable for all diameters (> 5 cm)
- Physical layout automatically adjusts contact pressure between wire cable and surface according to diameter, therefore good



DC2



DC3

ΔLA-B (ΔT
Leaf-to-
Air-
Broadleaf
type)
ΔLA-C (ΔT
Leaf-to-
Air-
Conifer
type)

Data Logger

comparability between measurement data
of trees with different diameter

- No injury to plants
- Stability against wind, snow, falling small branches and small fruits
- Easy installation
- Easy adjustment by the integrated turnbuckle

Limits

- The data must be converted (free Excel program available)
- The tree must be roughly circular

Delivery

- Complete with 5 m cable and 1 m wire cable

Options / Ordering Information

- Cable extension (please specify in meters)
- Extension of the wire cable (please specify in meters)
- Free Excel program for data conversion
- Data Logger

Technical specifications

Name	Circumference Dendrometer 2 (DC2)	Circumference Dendrometer 3 (DC3)
Suitable for tree size	Diameter>5 cm	Diameter>5 cm
Range of the sensor	15 mm	25 mm
Range of dendrometer		
With reset	unlimited	unlimited
Without reset for tree diameter of 10 cm 50 cm 100 cm	9.9 mm in Diameter 6.6 mm in Diameter 5.2 mm in Diameter	16.2 mm in Diameter 11.3 mm in Diameter 9.0 mm in Diameter
Accuracy	±2 μm ± 0.12% (CR1000 Logger)	±3.3 μm ±0.12% (CR1000 Logger)
Resolution	0.3-3.6 μm (dependent on	0.4-.6 μm (dependent on used

	used data logger)	data logger)
Linearity	2%	0.7%
Thermal expansion coefficient of the wire cable	<1,4 ×10 ⁻⁶ /K	
Thermal expansion coefficient of the sensor	<0,1 µm/K	
Operating conditions	-25 to 70 °C air temperature, 0 to 100% relative air humidity	

COMPANY

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