

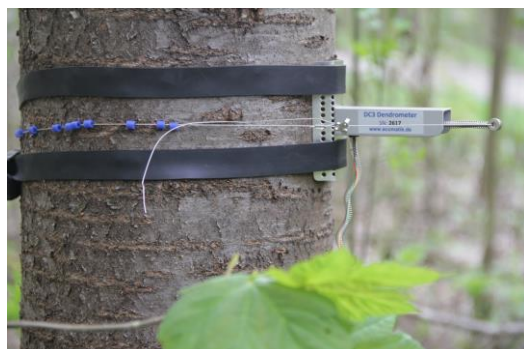
Circumference Dendrometer

Type DC

Technical Specifications



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Model: DC3



Model: DC4

Name of the Sensor		Circumference dendrometer			
		Type DC3		Type DC4	
Use area		slow/normal growing species		fast growing species	
Advantages to DC1 (and similar models)		Patented design: mechanical pressure on the surface is independent from diameter -> good comparability of trees with different diameters.			
Suitable for plant size		Diameter > 5 cm			
Range of the sensor		25.4 mm range in mm		50.8 mm range in mm	
		circumference	diameter	circumference	diameter
Corresponding	10 cm	50	16.2	107	34.0
range for tree	50 cm	35	11.3	80	25.6
diameter	100 cm	28	9.0	65	20.6
Resolution		The resolution of the sensor itself is infinite. The resolution of readings is determined by connected data logger, e.g.			
		CR1000: 3.3 µm Dendrometer logger DL18: 0.5 µm		CR1000: 6.6 µm Dendrometer logger DL18: 1.0 µm	
Accuracy		Dendrometer dependent: ±1.97% of reading (stable offset) ±0.98% of reading (stable offset)			
		Data logger dependent, e.g.: CR1000:±(0.04% of reading+10 µm) CR1000:±(0.04% of reading+20µm) Dendrometer logger DL18: ±0.1% Dendrometer logger DL18: ±0.1%			
Temperature coefficient		sensor		< 0.2 µm / °C in the whole range	
	wire			<1.4 ×10-6/K	
Linearity		<0.7%		0.5%	
Environment		Outdoor: -30 to 40°C air temperature, 0 to 100% relative air humidity			
Weight of the sensor		37 g without cable		47 g without cable	
Power supply		Stabilized Vex of 0.5 – 10 VDC, power consumption practically zero			
Material		Stainless steel and Aluminium			
Cable length		5 m. extendable up to 100 m			