

Circumference Dendrometer Type DC3 & DC4

Technical Specifications



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 diameter compensated -> better 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 range for tree diameter	10 cm	50	16.2	107
	50 cm	35	11.3	80
	100 cm	28	9.0	65
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:			
	Max. ±1.97% of reading (stable offset)		Max. ±0.98% of reading (stable offset)	
	Data logger dependent, e.g.:			
	CR1000: ±(0.04% of reading + 10 µm) Dendrometer logger DL18: ±0.1%		CR1000: ±(0.04% of reading + 20 µm) Dendrometer logger DL18: ±0.1%	
Temperature coefficient	sensor wire	< 0.2 µm / °C in the whole range < 1.4 × 10 ⁻⁶ /K		
Linearity	< 0.7%		0.5%	
Environment	Outdoor: -25 to 70°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, special alloy and Aluminium			
Cable length	5 m, extendable up to 100 m			