

## Combi Dendrometer

Combi dendrometer consists of one sensor and two mounting parts. This gives the user possibility of two applications, one for small plants and one for large plants. This is particularly advantageous for continuously monitoring growth, from very small to very large, using the same sensor. There two types of Combi Dendrometer available: DD-S2/DR7 and DD-S3/DR6.



DD-S2



DR7

Combi Dendrometer DD-S2/DR7



DD-S3



DR6

Combi Dendrometer DD-S3/DR6

## Technical Specifications

Name of the Sensor	Combi Dendrometer DD-S2/DR7		Combi Dendrometer DD-S3/DR6	
	DD-S2	DR7	DD-S3	DR6
<b>Suitable for plant size</b>	0.5-5 cm	>5 cm	0.5-6 cm	>5 cm
<b>Range of the sensor</b>	11 mm	11 mm	25.4 mm	25.4 mm
<b>Resolution</b>	The resolution of the sensor itself is infinite. The resolution of readings is determined by connected data logger, e.g.			
	CR1000: 1.5 $\mu\text{m}$ Dendrometer logger DL18: 0.2 $\mu\text{m}$		CR1000: 3.3 $\mu\text{m}$ Dendrometer logger DL18: 0.5 $\mu\text{m}$	
<b>Accuracy</b>	Dendrometer dependent: Max. $\pm 4.5\%$ of reading (stable offset)		Dendrometer dependent: Max. $\pm 1.97\%$ of reading (stable offset)	
	Data logger dependent, e.g.: CR1000: $\pm(0.04\%$ of reading+4.4 $\mu\text{m})$ Dendrometer logger DL18: $\pm 0.1\%$		Data logger dependent, e.g.: CR1000: $\pm(0.04\%$ of reading+10 $\mu\text{m})$ Dendrometer logger DL18: $\pm 0.1\%$	
<b>Temperature coefficient of the sensor</b>	$< 0.2 \mu\text{m} / ^\circ\text{C}$ in the whole range			
<b>Linearity</b>	$< 1\%$		$< 0.7\%$	
<b>Environment</b>	Outdoor condition: -25 to 70°C air temperature, 0 to 100% relative air humidity			
<b>Weight of the sensor</b>	13 g without cable		33 g without cable	
<b>Power supply</b>	Stabilized Vex of 0.5 – 10 VDC, power consumption practically zero			
<b>Output</b>	Digital: SDI-12 in $\mu\text{m}$ Analog: 0 – Vex in V DC			
<b>Data recording</b>	For Example: <ol style="list-style-type: none"> <li>1. Data logger (e.g. DL 18, or other with suitable analog or with SDI-12 input channels), cable connection between sensor and logger</li> <li>2. Lorawan (e.g. loP-S-LA), wireless connection via lorawan network</li> <li>3. NB IoT (e.g. loP-S-NA, loP-S-LTEMA), wireless connection via mobile phone network</li> </ol>			
<b>Material</b>	Stainless steel and Aluminium			
<b>Cable length</b>	5 m, extendable up to 100 m			