

BAND DENDROMETER DRS26

WITH DIGITAL SDI-12 OUTPUT

The band dendrometer enables continuous, non-invasive monitoring of changes in stem circumference. Its stepless reading allows precise monitoring of stem growth. The measurement range for changes in circumference is 65 mm; by resetting the band, the dendrometer can be readjusted to measure a larger overall circumference. The dendrometer is suitable for stems with a minimum diameter of 8 cm; with an optional base plate upgrade, stems with diameters from 4 to 8 cm can also be measured. There is no upper limit for stem diameter. The dendrometer is easy to attach non-invasively with a tension force of 15 to 20 N. Linearity is $\pm 1\%$ over the full measurement range.

MAIN FEATURES DRS26

- With a preconfigured SDI-12 data output
- SDI-12 cable with open ends for connection to a data logger or similar
- SDI-12 version 1.3 compatible
- Optional internal temperature measurement



TECHNICAL DATA

PARAMETERS	SPECIFICATIONS
Dimensions (L × W × H)	100 x 70 x 100 mm
Weight	~350 g
Housing protection class	IP 63
SENSOR	
Sensor type	Rotary position sensor
Measurement range (change in circumference)	65 mm
Minimum diameter of trunk	8 ... ∞ cm, (optionally 4 ... 8 cm with base plate upgrade)
Linearity	±1% of full scale
Resolution	<1 µm
Reading	stepless
Internal temperature measurement accuracy	±0.2 °C (within -10... +40 °C)
POWER SUPPLY	
Power supply voltage	5.5 ... 16 V
Current consumption idle	20 µA
Current consumption when measuring	6 mA
Warm-up time	300 ms
CONNECTION / COMMUNICATION	
Connector	Three wire Escha M8 connector male
Cable length	2 m, 5 m, 10 m (custom lengths available upon request)
Communication	- digital: SDI-12 version 1.3 compatible - SDI-12 cable: M8 female connector for the dendrometer; three wires to the data logger: brown = +Vcc, black = data, blue = -Vcc
ENVIRONMENTAL CONDITIONS	
Operating temperature	-40 ... 60 °C
Air humidity	0 ... 100 %
STAINLESS STEEL TAPE	
Tape length	20 m
Tape width and thickness	12 x 0.2 mm
Tension force	15 to 20 N in the entire area
Tape temperature coefficient	16 µm/(m·K)