



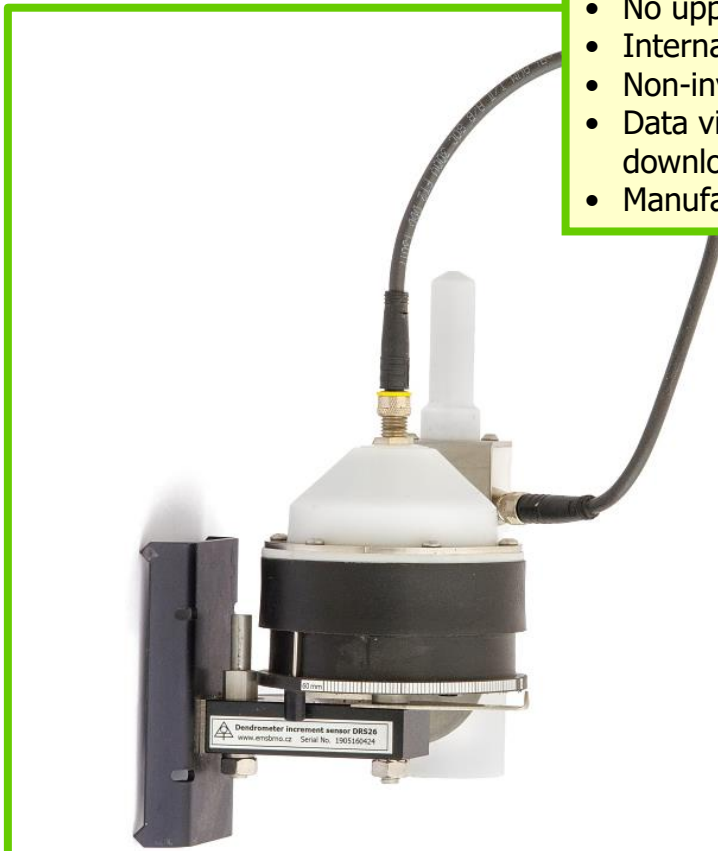
EMS Brno

Data Acquisition Environment
Hardware – Software – Cloud application
www.emsbrno.cz

EMScLOUD Increment 02

Main features:

- Data transmitting device with tree increment sensor
- No upper limit in stem diameter
- Internal temperature sensor
- Non-invasive fixing
- Data visualization, archiving and download fully supported by EMScLOUD
- Manufactured by EMS



Specifications:

- Rotary position sensor
- Step-less reading
- Minimal stem diameter 8 cm (optionally 4 – 8 cm)
- Increment range 65 mm
- Resolution less than micrometer
- Linearity 1% over full range
- Battery capacity ca 2 years
- Tightening strength 15 to 20 N
- Temperature measurement accuracy ± 0.3 °C
- Fixing tape from stainless steel 12 x 0.2 mm

General description

EMScLOUD Increment02 is IoT device intended for the measurement of stem increment of large stems with diameter 8 cm and larger (optionally 4 – 8 cm with base plate upgrade). Sensor output is calibrated directly in millimeters of increment of stem circumference. Data are transmitted via SigFox network. Data visualization, archiving and downloading fully supported by EMScLOUD Internet application.

The sensor is designed with respect to easy and fast installation. It is fastened on the measured object by means of stainless tape wrapped around the stem.

Installation notes

Sensor has to be placed on a relatively straight and regularly shaped part of stem at relatively smooth place without irregularities around the circumference. Sensor base should sit perfectly only and just on all four spikes. For more information read installation manual.

Specification

Measuring interval	30 min
Sending interval	60 min
Increment sensors type	rotary position
Range	64 mm of circumference
Linearity	1 % of full scale
Resolution	1 µm
Temperature measurement accuracy	± 0.3 °C
Tape strength	15 to 20 N in the whole range, stem diameter independent
Tape temperature coefficient	1.6×10^{-5}
Operating environment temperature	- 40 to 60 °C
Operating environment humidity	0 to 100 %
Battery lifetime	ca 2 years
Clock accuracy (-10 to 40 °C)	better than ±15 sec/month
Battery	SAFT LS 17500, 3.6 V, 3.6 Ah
Size	100 x 70 x 100 mm
Weight (incl. battery)	ca 450 g
Protection	IP 68

Two-year full warranty.