Sensor Description

Working with the Farmdeck app, the plant monitoring station accurately performs and collects precision agriculture measurements in order to establish the health of the plant or tree.
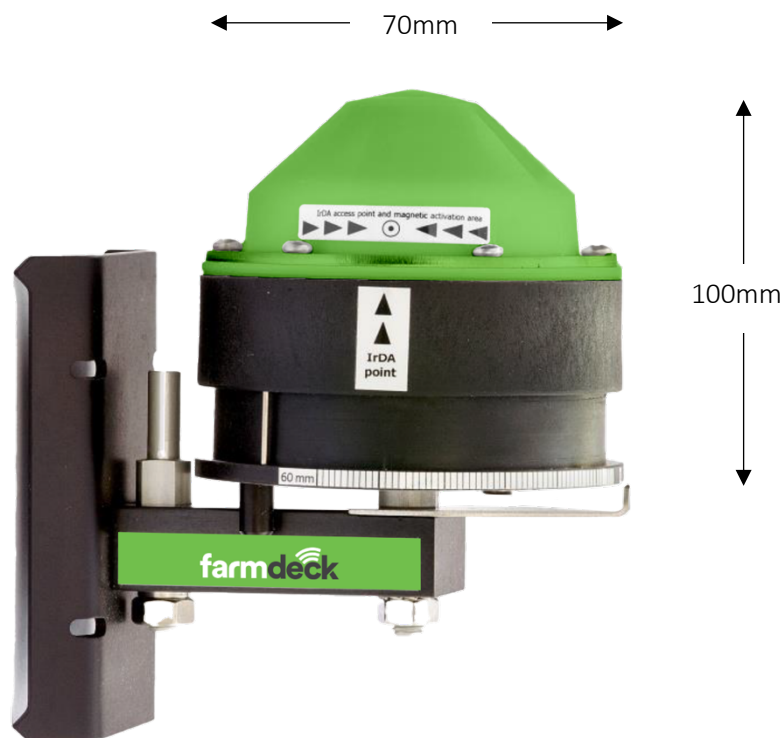
Features

- Accurately monitor sap flow
- Trunk diameter (Dendrometry)
- Canopy Environment (more available)

Applications

- Application Tree health
- Plant health
- Precision Ag
- Water consumption

70mm

100mm

Mechanical Features

Housing	Mountable enclosed housing
Dimensions (mm)	100mm x 70mm x 100mm
Weight	350g
Case Material	UV-stabilized ABS plastic

Device Power Supply

Battery	Solar panel with 18600 mAH rechargeable battery
Expected battery life	Up to 5 years

Operating Conditions

Temperature	–40ºC to +60 ºC
Humidity	0-100%

Radio/Wireless Connection

Wireless technology	LoRaWAN 1.0.3/1.1
Supported LoRaWAN device type	Class A End-device
Supported LoRaWAN Regions	US902 – 928,AS923, AU915 – 928, KR920-923
Configuration	OTAA, ABP, ADR

Data Type

	Sap flow (L/dat), Dendrometer (0.001 m increment), Canopy Environment (0 to 4000 (μmol m^{-2} s^{-1})

Optional Cellular Connection

Wireless Technology	LTE-M/NB/IoT
Supported LTE Bands	LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13
SIM card and format	Internal Nano 4FF SIM