

# farmunited



## FARMSENSE

Harvest your data,  
benefit from your data.

[www.farmunited.com](http://www.farmunited.com)



# FARMSENSE



The reliable sensor system for accurate information on the soil condition, climate and air conditions on your fields or special crops.

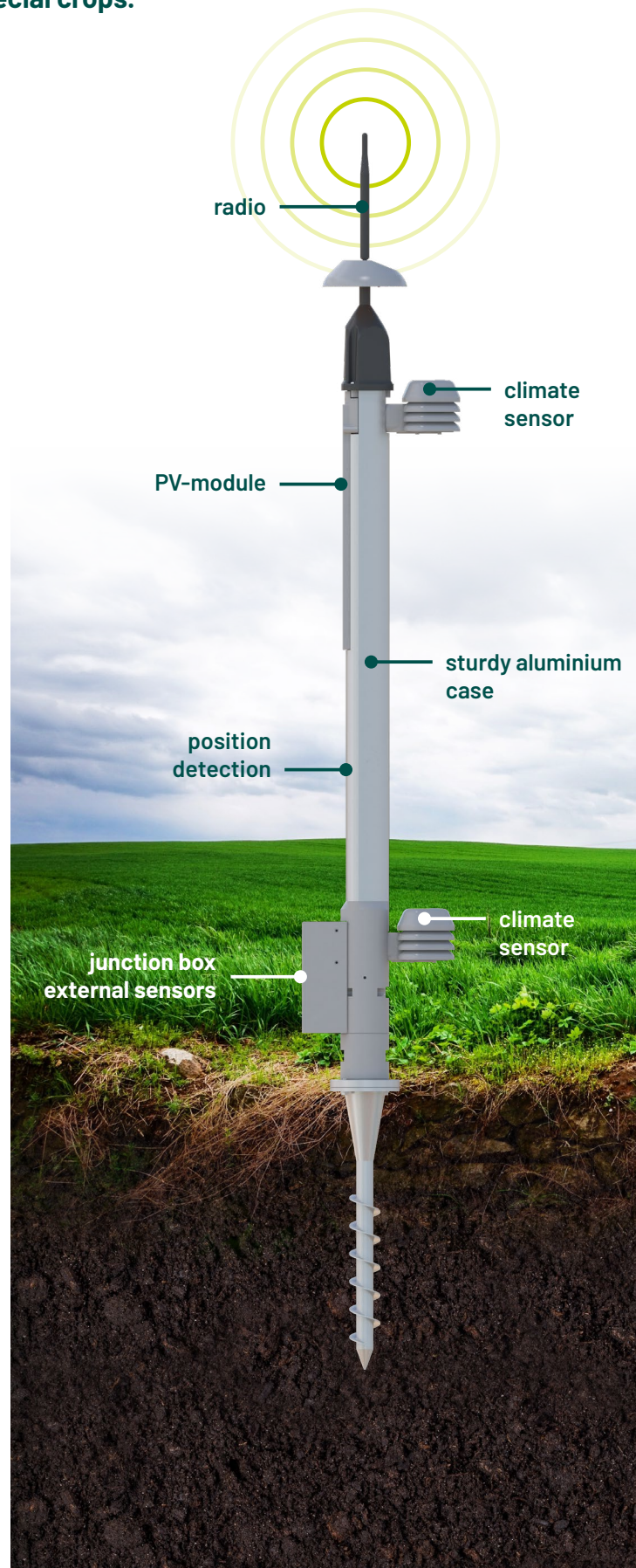
**FARMSENSE** is the new "sixth sense" for agriculture. The measuring station provides qualified data on the current soil condition, climate and air conditions, on the basis of which you can determine irrigation, but also sowing, fertilization and plant protection measures more precisely than ever before. We have developed **FARMSENSE** exclusively for agricultural customers. The valuable data you harvest is securely stored in Germany. You alone decide on its use and your profit.

## Advantages:

- Soil sensor system for moisture and temperature:  
Up to 3 external sensors can be adapted
- Two climate sensors at ground level for ambient temperature, air pressure and moisture
- Direct data transfer via Bluetooth, LoRaWan or IoT wireless network
- Measurement data clearly displayed via APP and browser
- Tamper-proof **distributed ledger technology** for data monetization

## Product Features:

- Easy installation
- Easy commissioning via mobile APP
- Sturdy construction (aluminium case)
- GPS for easy position detection
- Self-sufficient power supply via an integrated photovoltaic module



We reserve the right to effect technical changes





## Technical Data

### Radio standards:

<b>LoRaWAN</b>	Europe (EU) 863 - 870 MHz
<b>NB-IoT</b>	Europe (EU) 800 + 900 MHz radio bands
<b>BLE</b>	worldwide 2.4 GHz ISM radio band

### Sensors

Measuring Value	Sensor Type	Specifications
Air humidity	capacitive	measuring range: 10 - 90%
Air temperature	platinum measuring resistor	measuring range: -40 to +80 °C
Air pressure	piezoresistive sensor	measuring range: 500 - 1200 hPa
Volumetric soil moisture	capacitive	measuring range: 0 - 100 % vol. moisture (60 - 100 % restricted accuracy) resolution: 0.1 % accuracy: +/- 3 % (not calibrated)
Soil temperature	digital temperature sensor	measuring range: -40 to +80 °C accuracy: +/- 0.4 °C
Seismic activity		
GPS and GNSS geolocalisation		
Precipitation	capacitive	optional (from Q3/24)
Wind speed	thermal	optional (from Q3/24)
Wind direction	thermal	optional (from Q3/24)
Global radiation	silicon pyranometer	optional (from Q3/24)

Type	FARMSENSE
Dimensions	length incl. antenna: approx. 1360 mm - d: 70 mm ground spike with adapter: approx. 420 mm - d: 40 mm
Weight	approx. 6 kg
Operating temperature	-20 °C to +50 °C
Outer material	aluminium and plastic
Network connection	mobile phone based via NB-IoT network of Deutsche Telekom and/or transmission via LoRaWAN
Sensor measurement interval	variable, typically every 30 seconds
Transmission interval	variable, typically every 15 minutes (depending on battery charge level)
Service life	long service life, also without sunlight

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