

## Feature Description

Farmdeck uses Normalised Difference Vegetation Index (NDVI) with a range of satellite scanners and cameras imagery to remotely monitor and manage paddocks and pastures from an aerial view. NDVI remote sensing uses visible and near-infrared light to differentiate between healthy pasture (green) and sparse pastures (red)



## Features

- Monitor the quality and “lushness” of paddocks and pasture
- Monitor sward height, biomass, quality, phenological stage, productivity level and species composition
- Differentiate between pasture growth and degradation

## Applications

- Keep track of paddocks and pasture conditions based on soil, weather and human activities
- Retrieve grassland biophysical parameters over a period of time
- Monitor grassland degradation
- use trends for rotation plans to take advantage of summer cropping opportunities



# Satellite remote sensing for Paddock Monitoring and pasture availability calculation

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## Mechanical Features

Housing

Dimensions (mm)

Weight

Case Material

## Device Power Supply

Battery Solar panel with 1000 mAh battery

Expected battery life

## Operating Conditions

Temperature -40°C to +125 °C

## 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

Voltage Latitude / Longitude, 6 axes gyroscope (m/s).

## 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