THE WORLD’S FIRST WIRELESS NPK SOIL SENSORS & REAL-TIME ANALYTICS
Farmers lack soil data when they need it

Farmers need real-time visibility into soil conditions as they’re working their fields. Manual soil tests do not provide the timely data growers need, when they need it, leading to over- and under-fertilizing and mismanagement of the soil.

Lack of soil data during growing season lowers yields and profits, and harms the environment.
REAL-TIME SOIL DATA INCREASES PROFITS AND HELPS THE ENVIRONMENT

How it’s done:

Sensors and analytics detect real-time soil conditions and identify problems before they’re evident, recognize patterns, and provide insights to improve conditions.
How they benefit:

Farmers, governments, retailers, and financial services firms all have a need for increased visibility into soil data to help reduce risk, prevent and manage environmental issues, and increase transparency in the supply chain from farm to fork.
INTEGRATED END-TO-END SOLUTION MAKES IT EASY TO GET STARTED

Teralytic’s soil sensors constantly monitor soil and crop conditions across 26 data points

Sensor data is sent to the cloud via a LoRa Network connection

Machine Learning, AI and soil science are combined to analyze data

Sensors continuously monitor soil and make new recommendations as needed

Insights and recommendations are delivered directly to agronomists and farmers
THE WORLD’S FIRST WIRELESS NPK SENSOR

HEAD

MICROCLIMATE HEAD
Air Temp
Humidity

Light

GAS SENSORS 6", 18"
Aeration (O₂)
Respiration (CO₂)

SOIL SENSORS 6", 18", 36"
Nitrate
Potassium
Phosphorus
pH

Soil Moisture
Salinity
Soil Temp
SENSOR ARRAYS AT THREE DEPTHS

6, 18, and 36 inches (15, 45, and 90 cm) give stratified view of soils.
SIMPLE TO USE, YET DURABLE ENOUGH TO MEET THE DEMANDS OF YOUR FARM

Easy to install with our soil augers. One button push to set up and run.

No wires, antennas, or solar panels to break, powered by a 2-3 year battery, which is refreshed as long as the subscription is active.
INSTALL WITH SPECIAL-SIZED SOIL AUGURS WE RESELL
ADVANCED WIRELESS TECHNOLOGY CONNECTS EVEN THE MOST REMOTE FARMS POSSIBLE

Teralytic Wireless Gateway

Communicate and manage readings from the sensors up to 15 miles away via LoRa.

Send sensor data to Teralytic Cloud via cellular, satellite, Wi-Fi, or ethernet.

Sensor Placement

Sensors are placed every 10 to 50 acres to give farmers a granular view of their fields.
CONTEXT-AWARE INSIGHTS AND RECOMMENDATIONS

We provide crop-specific recommendations on all of our readings and allow growers to set their own ranges and alerts. Be alerted only when you want to and only when it’s relevant to your crop and soil.
EASY-TO-USE WEB AND MOBILE INTERFACE

Farmer-friendly dashboards and analytics

Easy-to-use tools provide actionable insights combined with open APIs, getting the right data to the right person or tool to make decisions.
Historical and predictive analytics assist growers in preventing problems before they're apparent.

VIEW REAL-TIME AND HISTORIC DATA

Drill into your data to see trends and analytics over time

Historical and predictive analytics assist growers in preventing problems before they're apparent.
IMPORT SSURGO SOIL DATA, SHAPEFILE AND WEATHER DATA

Import soil data from SSURGO (for US), shapefiles and soil surveys and view from our platform.
WE BELIEVE FARMERS OWN THEIR DATA

Farmers own the personally identifiable data generated from their farms. The ag data, financial data and personal data farmers provide us is their and we take their privacy and security seriously. We will never share their data with another party without their explicit consent.
TERALYTIC’S OPEN API AND SOIL DATA ENRICH ANY APP IN THE AGTECH ECOSYSTEM
TERALYTIC’S SUBSCRIPTION PRICING MODEL

Simple, affordable pricing model

**Fair subscription pricing**
Teralytic charges just $200 per sensor plus a yearly subscription of $300/sensor/year. Lowest priced, most comprehensive soil sensors available.

**All-inclusive pricing**
SaaS-based pricing includes sensors, networking, and software and analytics to get up and running.
TERALYTIC’S SUBSCRIPTION PRICING MODEL

Simple, affordable pricing model

Crop-based pricing
Crop type determines sensor density between 10 and 75 acres.

Streamlined Onboarding & Ordering
Online tool during onboarding helps with sensor placement and pricing. Visit https://www.teralytic.com/pre-order.html to get started
SELECTED USE CASES
INDONESIA & MALAYSIA PALM OIL
Improving Productivity

Current productivity per HA
4.6 CPO Ton/HA = $2,950

Potential productivity per HA
8-9 CPO Ton/HA = $5,130

19m HA in Indonesia/Malaysia to improve!
LARGE PALM OIL PLANTATION: CLOSING THE YIELD GAP

Source: Gfroerer, 2009
The ability to see subsoil moisture and nutrient information helps farmers better manage crops throughout the growing season and make better marketing decisions.
U.S. CORN – IMPROVING OPERATIONAL EFFICIENCY THROUGH REDUCED FERTILIZER INPUTS

Current productivity per acre = $800

Current savings per acre >10% fertilizer cost

Potential productivity per acre = $900

Current savings in dollars Up to $43/acre
WORLD-CLASS SOIL SCIENTISTS, CHEMISTS, AND TECHNOLOGISTS

Decades of soil science, chemistry, and technology experience from world’s top schools and companies
FINALLY MANAGE YOUR SOILS IN REAL TIME TO INCREASE PROFITABILITY

Our hardware, software, and platform enable farmers to monitor soil conditions 24/7/365 days a year.

No more snapshots and lag time between soil samples.

Leveraging wireless sensors and machine learning, farmers are able to increase crop yields, reduce fertilizer costs, make better decisions, and improve profitability throughout the growing season.

Measure NPK in real time.

We enable farmers to make measurements of their soil quality and fertility throughout the growing season. Most important to farmers, and our core IP, is the ability to measure detailed NPK levels.

Easy to purchase and set up.

Teralytic provides all of these capabilities to farmers in an easy-to-use subscription model that includes the sensors, analytics, networking, and APIs to use this data with third-party apps.