OVERVIEW

Globally, irrigated farms account for less than 20% of total farmland but produce more than 40% of global crop output. The problem is that most farms that utilize irrigation, over-irrigate by 30% or more leading to wasted water, energy and negative environmental impact. Too little water can destroy yield and make crops more susceptible to disease and pests. While too much water can inhibit yield and foster fungal growth that is expensive to treat. Getting the right amount of water at the right time is critical to optimal crop production.

The Intelliroot system provides an affordable, easy to use way to remotely monitor the subsurface moisture levels that results in prescriptive analysis to inform irrigation decisions before they need to be made.

Moisture levels within the soil are measured at regular intervals and communicated wirelessly through a secure cloud-based system. The measurements are made at multiple depths to ensure managers see water available at the root zone. They are then displayed on an intuitive data portal so irrigation managers can see all of the water needs under their responsibility and make the most informed decisions to maximize water efficiency across the field. Each sensor is calibrated to that specific soil and crop type and accounts for growth stage to make optimal recommendations. The Intelliroot system is fully interoperable with the complete line of smart farm products by Agrisource Data.

The Intelliroot system is built to work on the RPMA network globally. All components are ruggedized for prolonged deployment in the typical agricultural environment.

Getting your irrigation application right is half the battle in crop production. Not getting it wrong is the other half.

BENEFITS

The Intelliroot soil moisture monitoring system allows farm managers and other stakeholders to understand exactly how much water is available to the crop now and in the future so important management decisions are made easy. Proper application of water, driven by Intelliroot data can lower costs (water and energy), reduce loss due to runoff, and improve yield quality and quantity. A comprehensive view across a farm of available water ensures each plant gets the right amount at the right time in the right place.

- **Monitoring**
  Intelliroot measures soil moisture at multiple depths to ensure the data being used represents what’s available in the bulk of the root zone

- **Communication**
  The system operates utilizing the 2.4GHz frequency RPMA network available globally

- **Endurance**
  The system can operate for up to 24 months on an affordable battery pack

- **Environmental**
  The system uses lead-free components & is fully RoHS compliant

FACTS

- Proper application of water is the most important variable in crop production
- Communication is often a major limiting factor in rural areas; RPMA solves that
- Sustainable operations depend on data-driven management to reduce water and energy use
- Proper water management leads to bottom line savings and top line value increases