



Soil Moisture Monitoring

Making every drop count

Complexity



Price



Scale



Australia is a dry country, and irrigation is the lifeblood of many agricultural communities. Irrigation not only boosts production, but can also compensate for erratic rainfall patterns and uneven distribution.

Soil moisture monitoring is a vital tool that can be deployed on irrigated properties of any scale to ensure the applied water is used effectively and efficiently, minimising waste, improving productivity and enhancing the sustainability of a farming system.

How

As plants grow their active root zone moves through the soil profile. This means that the water must reach an area that is shifting constantly, in order to be properly absorbed by the plants.

Soil moisture monitoring systems work by using sensors and probes to determine soil wetness at different soil depths at a range of locations. This then informs how best to ensure applied irrigation water reaches the places it needs to go.

While some soil moisture monitoring systems also look at flow, weather, crop, environmental and hydraulic conditions, providing real-time updates on field conditions, the most basic moisture detectors are still effective tools for farms.

For croppers, soil moisture monitoring systems can be used to optimise the applied irrigation water for different paddocks, which is especially useful when dealing with different varieties.

For horticulture, soil moisture can provide better control over the landscape and irrigation needs. It offers a snapshot of what is happening below the plants, and can quickly identify problem areas in real-time.

It's invaluable during the growing season, and the data provides more insights as the length of time spent monitoring increases.

Soil moisture data can tell you what's going right, what's going wrong, and how best to fix it.

Why

- Efficient irrigation means less water wastage. It saves on money and energy use, while also conserving water where it is not needed.
- Australia's water supply is precious. Every drop of irrigation water counts and monitoring soil moisture ensures that this necessary resource is conserved, building a sustainable industry that will thrive long into the future.
- Equally importantly, proper monitoring of soil moisture will help plants grow better – it ensures that nutrients reach the root zones.

Soil

Water

Efficiency



Benefits

Improved water efficiency

Using less water means using less energy, and paying less money. It helps optimise water at the right place and at the right time.

Better crop growth

Well-irrigated crops are proven to grow far better than un-irrigated alternatives.

Data insights

Brings together data that can be used in conjunction with other sets to create powerful insights into farm optimisation.

Getting started

1. Identify which crops you want to assess.
2. Obtain soil moisture probes from reputable suppliers.
3. Install the probes and sensors at regular spaces throughout the fields and/or pastures.
4. Using software, bring together the data gathered from the probes and sensors to provide an overview of current irrigation levels.
5. Continue to adjust probe depth as needed to ensure data remains relevant as root zone moves through the soil.
6. Adjust irrigation flow to optimise growth and water usage – this is an ongoing process that may take several growing seasons.

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More Info

For more information on how you can deploy this technology on farm, give us a call or visit our website via the link below or QR code.



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