

“It’s not the quantity of water applied to a crop that is important: it is the quantity of intelligence applied which determines the results — there is more due to intelligence than water in every case.”

— Alfred Deakin, Minister for Water Supply (later PM), addressing irrigators in 1890

Monitoring and Control Solutions for Agriculture, Turf and the Environment

A really good irrigation-management system ...

... isn’t “one size fits all” or about using a certain brand of probe. It’s about the data you get out of it and how you can use that to make well-informed decisions.

... is simple to use, yet has powerful features “behind the scenes”.

... can connect to any sensor, so you can upgrade as new sensor technology is released, and still keep all your other equipment.

... is cost effective. You can individually install either the control or monitoring system initially (depending upon your needs). The operational features of each system integrate seamlessly if you want to add the other section later.

... is all of these and more.

MAIT Industries has a really good irrigation-management system —

perfectly tailored for your needs and budget. MAIT offers choice (it’s not locked into using a specific sensor technology or brand). It also has the expertise to design a system around your needs. MAIT and its agents look at what data you need to run your business more efficiently, then provide the irrigation solution (the software and hardware) that will give it to you. It’s that simple.

You get a totally integrated system that fits your needs perfectly. Not only that, you can add to it when you need — just like the building-block set you had when you were a kid.

With MAIT, it’s all about the information, because, as everyone knows, information is power. Imagine how your business would benefit from more informed decisions, labour savings, improved control and better water management? Imagine how you would benefit!

Q Why do you need to know *exactly* how much water your soil is holding right now?
A. To maximise your profits.

Q How do you know exactly how much water your soil is holding right now?
A. By using MAIT iNTELLiTROL.

**Efficient water use = saving water + optimised plant production
= increased profits**

How much control do you have when watering your property?

Do you know if your crop is over-watered or under-watered?

Have you considered the effect that either has on yield and quality?

Do you know you can achieve significant improvements in both yield and quality by improving your water management? Then add in savings for power and water costs — and, probably most importantly, your time.

Using iNTELLiTROL® from MAIT Industries will allow you to do all this.

Good information is your key to a healthy business. iNTELLiTROL gives you excellent information.

What is iNTELLiTROL?

MAIT iNTELLiTROL is a cost-effective, flexible and upgradable monitoring and control system, giving you real-time, in-depth information.

It can be used as a simple monitor or as a fully integrated solution, with sophisticated data-collection and controlling functions.

iNTELLiTROL is a sophisticated environmental monitoring and control system in a cost-effective package. But while it's comprehensive, we've deliberately made it simple to learn and use.

iNTELLiTROL lets you measure and record soil

moisture levels in dozens of locations every hour of the day, and you can control water delivery to remote parts of your property — all without leaving the office.



What iNTELLiTROL is not

MAIT iNTELLiTROL is not a boxed-kit of probes, radios and software. You do not have to select Option 1 or Option 2 and just live with the bits that don't quite work for you — or wish they were slightly different.

No two farming operations are exactly the same; there will be differences in soil type, topography and microclimates, not to mention crop variations. For that reason it makes no sense to have a "one size fits all" irrigation product.

You need a solution that fits your unique farming business and needs. The expertise of MAIT and its agents means you get irrigation equipment that uniquely fits your farming business and needs.

Why is it so good?

iNTELLiTROL's scalability is a key to its popularity. Unlike a television or stereo, we've deliberately designed it so you don't need to "hang off" on installing irrigation equipment "just in case there's a technology upgrade".

iNTELLiTROL's open framework, for both hardware and software, allows the system to grow and evolve over time as your needs change. For instance, it can start off as one sensor and a base station.

Then, you can just keep adding sensors or irrigation control; there is virtually no limit, and nothing becomes redundant. This makes it easy to expand and cost effective.

We also make sure that you get the most efficient system possible from your investment. iNTELLiTROL uses interfacing technology to provide a universal platform that accommodates a wide range of sensor devices. So it's not just restricted to MAIT's proprietary sensors: iNTELLiTROL's open system technology accepts inputs from different manufacturers. Virtually any sensor and device can be monitored, logged and graphed. That makes it truly flexible and cost effective for you.

Complex scheduling, made simple

iNTELLiTROL's irrigation-scheduling software in calendar view shows both future and past irrigation events, making it one of the most user-friendly scheduling methods ever designed. In fact, growers can set up very complex schedules in just a few minutes. You can then save them and name them for future use. What could be easier than that? With "drag and drop", and "real names", iNTELLiTROL's simplicity is hard to beat.



Becoming more efficient with your water management is not only about saving water. Applying the correct amount of water at the correct time increases crop quality and yield potential, reduces fertiliser leaching, reduces crop stress and susceptibility to disease and pests, plus increases the long-term sustainability and profitability of your enterprise.

For case studies and white papers, plus more information on products, visit www.mait.com.au

And because it's completely Windows based, all the software already looks familiar, making it super easy to navigate.

What can iNTELLiTROL do?

Because of its scalability, iNTELLiTROL can be used as a simple soil moisture monitoring device, right up to a complete command system.

With the complete system installed, iNTELLiTROL can operate remote valves to deliver water to the appropriate areas of your property. The system can even be configured to monitor the watering system, and alarms can be triggered for valve failures, pressure irregularities and so on.

iNTELLiTROL can measure soil moisture levels, air temperature, humidity, rainfall, evapotranspiration, wind speed and more. Sensors can be safely hard-wired underground, or radio linked to allow data to be transmitted to your computer. Our custom-built software records and displays the data, making it easy for you to determine your optimum watering pattern.

iNTELLiTROL has the ability to control standard 24v AC and remote 12v DC latching solenoids, so you can control irrigation in the field even where no local power is available. Alarming functionalities alert you when conditions are out of range. We also have frost and heat schedules that can be programmed to initiate irrigation events when environmental conditions reach predetermined set points.

Achieve higher yields by delivering water to your crop when it needs it most — not just when you can find the time, or when the neighbours are doing it.

iNTELLiTROL is flexible

The iNTELLiTROL system can be supplied in a number of configurations.

The stand-alone iNTELLiTROL logger gives you a flexible recording system that can monitor a wide range of sensors. Data can be uploaded from field loggers using a laptop in the field, remotely using GSM modems. Or, stand-alone loggers can be integrated into the telemetry system using cable or by connecting one of our radio modules. (iNTELLiTROL graphing software gives you a data-management platform for the stand-alone loggers and the telemetry system.)

iNTELLiTROL can also be used to control your watering — all from the one package. Powerful irrigation-scheduling software allows you to set up complex irrigation schedules that would otherwise be difficult or labour intensive.

iNTELLiWEB

The iNTELLiWEB system allows remote, web-based monitoring of larger installations, making it ideal for local councils, rural water authorities, large horticultural properties or where access to field stations is difficult.

Access to the data is via a standard web browser over the internet (so you can monitor data "in-house" or contract it out). Visit our website for more information, www.mait.com.au

Right now is the very best time to begin building your water-control network, because right now is the time to improve your profits.

What to expect from your system and the people who provide it	MAIT iNTELLiTROL
Practical knowledge of soil and crop needs	✓
Agronomist input into design and sensor location	✓
The capability to accommodate all sensor types	✓
Monitoring and control capability	✓
Storage of data when power fails (battery backup)	✓
Graphical display on your computer	✓
Scalability — add components as your needs grow	✓
Capability to install and maintain the system, and supply parts	✓
Australian designed and manufactured	✓



What our customers say

"We have used the system to produce savings in man power. Our water savings have increased by 15% in each year since installation — but the real benefit is in fruit size: since installing the iNTELLiTROL network, our average fruit sizes have increased by 3 to 4mm."

— B.F. & J.P. Richardson,
Lake Boga, Vic

Company profile

MAIT Industries provides innovative monitoring and irrigation-control solutions that help growers, horticulturists, turf managers and other water users and providers to improve their water-management practices.

Our company and products are driven by our agronomic and engineering backgrounds.

We've been developing and perfecting irrigation technologies for Australian conditions since 1994. Today, our products are used Australia wide, by large and small enterprises. The scalability of our solutions means a customer can begin with a basic system, then add as their needs grow. Clients tell us this is just one of the reasons they like our equipment.

Another is its technical excellence.

We've developed several technologies since we began, including our flagship product, iNTELLiTROL. This integrated monitoring and irrigation-control system readily interfaces to a wide range of sensor technologies. iNTELLiTROL's genesis was guided by what our clients told us they wanted to know, and wanted to be able to do, with irrigation.

With our in-house agronomic and engineering expertise, we gave careful consideration to all practical and technical issues during its R&D. The result is an advanced system that provides cost-effective and reliable outcomes.

We also work closely with our customers to source, develop and trial concept products. By remaining at the forefront of technology, we know our customers have the hardware and software that best supports their business needs. As far as our customers are concerned, they have the best equipment for the job.

Together with our customers, we have developed a raft of innovative hardware, software and firmware solutions that include iNTELLiWEB (web-based data collection and control) and software, such as iNTELLiGRAPH and iNTELLiPUMP.

MAIT Industries' head office is in Melbourne, Australia, and our regional sales and back-up support office is in Shepparton, in Victoria's Goulburn Valley.

MAIT also provides solutions for organisations needing to monitor and audit the prevailing conditions and the impact of their actions on the environment. For instance, councils monitoring water-flow meters to quantify usage; water authorities monitoring ground-water levels and soil EC where treated effluent is reused for irrigation; factories monitoring wind speed and direction to record emission drift; and researchers monitoring water quality and flow in river systems.

To improve the quality of your crop, and your bottom line by increasing water-use efficiency, call us on 1300 739 920, or visit www.mait.com.au for more information on products, case studies and white papers.

AUTHORISED DEALER



Monitoring & Control Solutions
Agriculture • Turf • Environment

"I have found the MAIT telemetry system very reliable and robust since buying it 3 years ago. The ability to access soil moisture and other measured information wherever I have access to the internet means I can continually monitor soil moisture levels, ensuring we're matching tree moisture requirements daily. As a result, we are maximising our tree growth, which follows through to maximising crop yield, and, in any high-value crop, yield is king."

— Matt Mitchell, National Manager Cotton & Technical Operations Manager — Almonds/Olives, Rural Funds Management Ltd, Hillston, NSW

"Using MAIT's iNTELLiTROL means we can get irrigation just right; we completely avoid any wilting. After rainfall, it can be hard to work out when to start irrigating again because you're not actually sure how far the moisture has penetrated. I can just sit down at the computer, see what the crop has been using, look at the weather, and manipulate irrigation around rain events. It can even help us judge when to speed up irrigations. The way the information is presented is really fantastic; it's very simple to use: quick and easy. We can qualify water use even into what's drainage. This technology has allowed us to plan our irrigation much better, saving time and money."

— Craig & Helen Reynolds,
Congupna, Vic (broadacre cropping)

"iNTELLiTROL'S irrigation scheduling software in calendar view shows both future and past irrigation events. It's one of the most user-friendly scheduling methods I've ever seen. Actually, the whole scheduling section is great: being able to set up very complex schedules in a few minutes, and then being able to save them and name them for future use is brilliant."

— Lindsay Parker, Sprinkler Fix (MAIT agent), Kilsyth, Vic