Irrigation-Management Solutions for Agriculture, Turf and the Environment

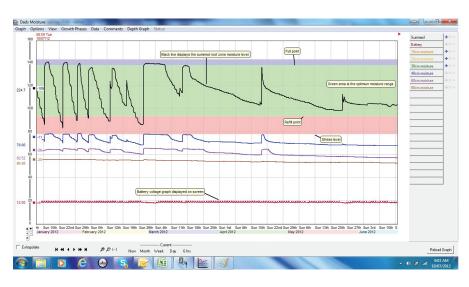


introlligraph

iNTELLIGRAPH is software that displays the information collected with your iNTELLiTROL logging system. The program is easy to use, and presents the data in a way that's simple to read and interpret.

Recording data is only the start. There is no value in collecting information unless it can be presented in a format that is easy to read and interpret. iNTELLiGRAPH allows to you to "value add" to the data you collect by displaying the information in a user-friendly and intuitive way, with many practical features that help you to get the maximum value from the data collected.

iNTELLiGRAPH goes beyond just plotting and printing the information you collect: by taking the next step and evaluating the data, you have a highly useful tool to guide you on using resources effectively. Decision making is easy; with no guess work, you can make informed management decisions.



iNTELLiGRAPH:

- is straightforward to use
- has easy-to-read, simple and intuitive graphs of your field data
- can display data from any sensor, or combination of sensors, for analysis and interpretation
- allows you to determine, easily enter and adjust your own full, refill and stress points for each probe site
- allows you to enter and adjust multiple watermanagement levels for different crop-growth stages to best manage irrigation as the crop's water needs change
- automatically updates all charts and graphs after data has been uploaded (no need to upload, save files and load data)
- has operational features (such as in-built models) that value add to the presented data, including chill units and growing degree days
- allows summary reports to be generated when integrating weather station sensors
- has the ability to total or average moisture sensors in any root zone you select
- presents sensor data either graphically, or as gauges on a dashboard for viewing weather data, flow, pressure and other sensors
- calculates evapotranspiration data from weather sensors and allows changes to crop factors
- allows you to manually enter any data you additionally collect (such as rainfall, fruit size etc.)
- predicts irrigation dates based on water-use rates over the previous 24 hours
- allows you to add comments that are displayed on the graphs
- can be easily integrated into your existing iNTELLiPUMP control system for plotting irrigation run times, pressure and flow data, plus automating irrigation based on sensor inputs
- is designed in Australia, by Australian agronomists and engineers, with client feedback
- has a simple database structure allowing easy management of historical data
- allows for easy exporting of data files in CSV format
- allows data to be printed out for hard-copy reference
- offers exceptional value for money

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What does iNTELLiGRAPH show you?

The easy-to-read summary page gives a simple, intuitive snapshot at each probe site, displaying:

- · current date and time of collected data
- · soil moisture status
- · irrigation due dates
- water use
- · set points (full, refill and stress)

A short, coloured bar — like a fuel gauge — for each probe site shows full (blue) refill (red), optimum moisture (green), while the stress point is indicated by a flashing red box (see image below).

An arrow above the bar indicates the current soil moisture level at that probe site.

For more information beyond the summary, growers simply click on the bar, bringing up a detailed chart for that chosen site.

Based on the previous 24 hours' water usage, iNTELLiGRAPH automatically calculates when moisture levels will hit the refill point. Once those refill points are set, iNTELLiGRAPH automatically calculates the predicted irrigation date and the number of days until the next irrigation is due.

Automate your irrigation

By linking iNTELLiGRAPH with iNTELLiPUMP irrigation-control software, growers can program and automate irrigation events based upon any sensor input — such as air temperature for frost control and heat stress, disabling irrigation on rainfall or wind conditions, or to turn the irrigation on and off based on soil moisture conditions.

Any relevant sensor input can be used to automate.

"iNTELLiGRAPH works really well for us. It has a lot more features and really, is very user friendly with all the icons. We put it in as a trial, and it paid for itself in the first year. Our markets demand quality, and we were able to get bigger size fruit – because we knew exactly how much moisture was underground – and were right on top of pest control [via temperature and GDD readings]. Being able to add weather stations and get live updates is a really helpful tool.

"Being iPhone compatible saves so much time. I can set alerts for moisture levels, and it will send a message to my phone, then I can just jump on the computer, iPhone or iPad

"We also chose it because of the backup service – including remote problem solving."

 Michael & Donna Potter, Rettop Farming, Woorinen, Victoria (stone fruit growers)





Data from weather sensors can be displayed either graphically or as gauges on a console. This allows you to quickly see current weather conditions, which are updated automatically as new data is uploaded.

"Our old system had very clunky read outs and couldn't accommodate moisture probes and didn't generate graphs. So we used stand-alone probes supplied by other agronomists, who would e-mail us graphs. I live on the MAIT system now; I can see everything that's going on.

"We had a long drizzly rain period recently, and I could see from the graphs it was only making the surface sloppy, underneath was dry, so I told the guys to turn on the irrigation. They turned up their noses until I showed them the graphs! Managing our properties that have MAIT's iNTELLIGRAPH is easier by a mile—it's a better tool for better decisions and management. I have it set up to log every 10 minutes, but it's totally flexible, and I can change that at any time.

"With our old system, we never knew if the pumps ran properly all night or not, so it meant going for a drive every morning to see which blocks were wet. You really had to drive the whole property to do it properly, because it might be the block you didn't drive past that wasn't wet. Now, I can just check the graphs. It's so simple.

"iNTELLIGRAPH is so user friendly and powerful. MAIT knew what was needed and they've done a great job.

"I'm starting to gather enough info now to set benchmarks — and that's really worth money to us."

— Phillip Spokes, QA Officer & Agronomist, Mackay Bananas, Tully, Nth Qld

Dryland uses

iNTELLiGRAPH is also highly useful for dryland farming.

Research centres, broadacre farmers and graziers with pasture, have all found the iNTELLiGRAPH's features valuable.

Parameters such as full and refill points are not directly relevant to dryland users; however, iNTELLiGRAPH's features and presentation of the relevant data allows these users to effectively monitor rainfall and its impact on the soil moisture status within the profile. They can also monitor soil temperature, and use this to manage sowing decisions, fertiliser inputs and other aspects, such as calculating predicted yields.

Tailoring for crop-growth stages

iNTELLiGRAPH allows you to enter and adjust full, refill and stress set points. This ability is important, as it allows you to establish the correct irrigation strategies based on your soil type, the crop and its specific growth stages.

Up to six different growth stages, with separate full, refill and stress levels, can be entered for each probe site. This allows varying irrigation strategies to be applied at specific growth stages of the crop.

This is a very straightforward process with iNTELLiGRAPH.

Flexibility to display data from any sensor iNTELLiGRAPH has been designed to be as flexible as the iNTELLiTROL data-logging system.

If your data logger can read any sensor, then the software you use needs to present the information from any sensor, or combination of sensors, allowing quick and easy interpretation.

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.

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