

iControl

Manage your
irrigation
systems
remotely



iControl
PANELS

iControlStandard 6

iControlLite 8

iControl Panels Comparative Table 12

iControl
MANAGEMENT

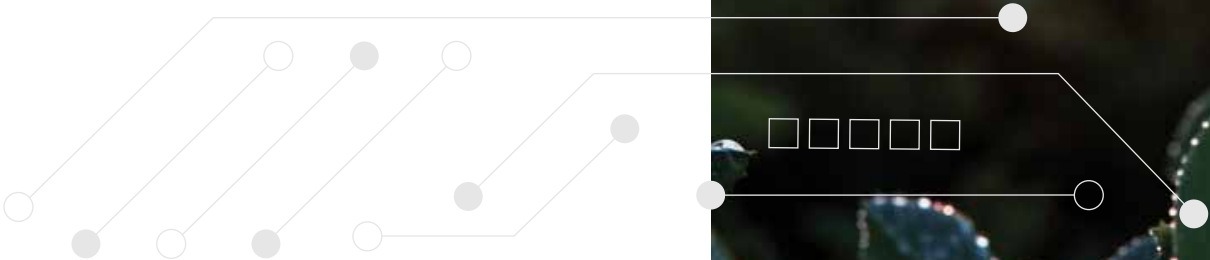
iTrack 18

iControlRemote.....20

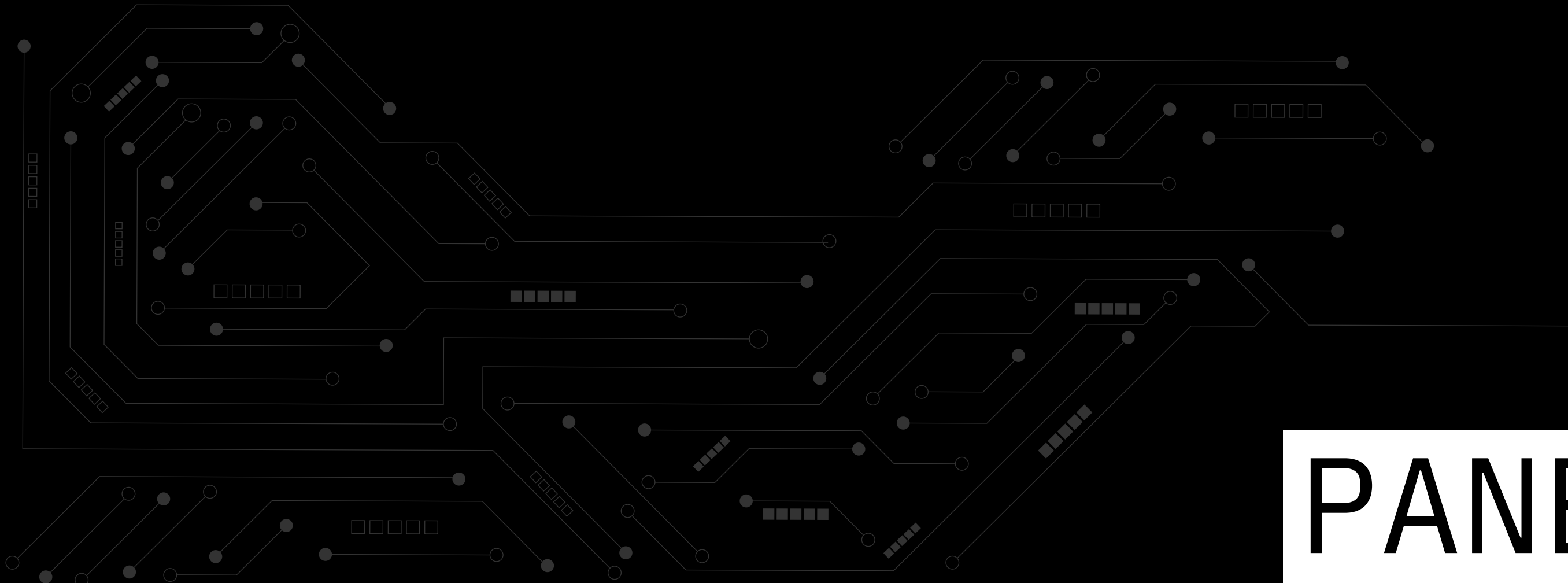
iControlPump 24

iControlSoil 26

iControlWeather 28



iControl



PANELS

What is iControlStandard?



The iControlStandard is a complete control panel that enables manual operation control over the classic functionality of a pivot using the switches on the dashboard.

Operator controls are standard electro-mechanical devices which include a voltmeter, hourmeter, and percentimeters, and are operated using either push buttons or twist switches.

iControlStandard panels are operator-friendly and easy to understand. They incorporate the highest quality electrical components and most advanced technology to effectively monitor and manage your fields.



iControlStandard functions

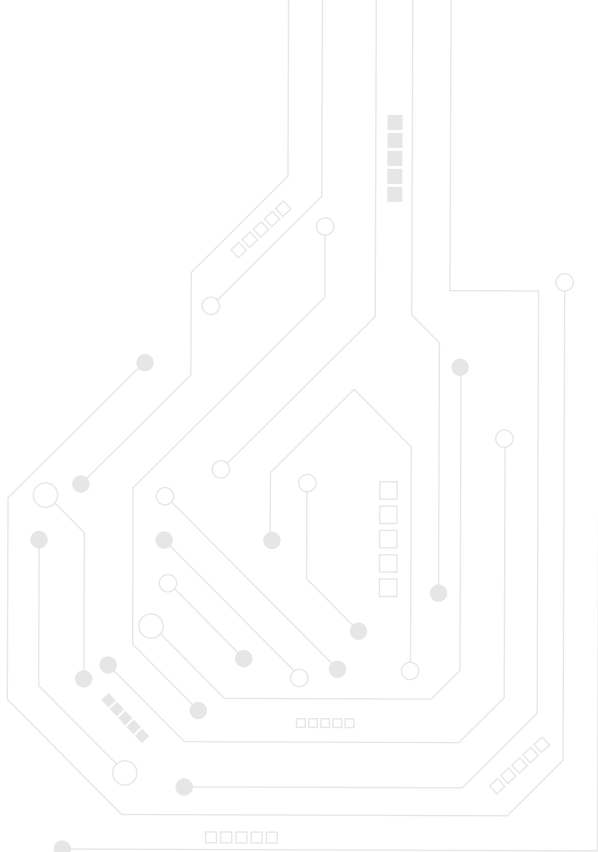
The iControlStandard is an easy-to-use control panel that enables the basic functionality of a pivot to be controlled using switches.

- With manual start operation, the machine will begin moving once the Start Switch has been turned to the start position.
- Automatic start operation is designed to start the machine automatically as soon as the power supply is connected.
- Auto-reverse: once the machine reaches the field-end barriers, it will stop and then perform its run backwards.
- Percentage timer: this timer is used to regulate the speed of advance of the pivot, determining in turn the film of water to be applied per cycle.
- The Irrigation control panel has a switch to control the irrigation of the pivot. The options available are fertigation position, irrigation position and the pivot will move without watering.
- Pivot direction sets the direction and enables the Auto-Reverse feature.
- Safety override: iControlStandard is fitted with a manual override for the safety system of the machine.
- iControlRemote button supplies the iControlRemote device.

Using the iControlRemote switch you can enable or disable remote control of your center pivot.

iControlStandard are designed based on our long experience in the industry, The thousands of panels we've distributed all over the world, and our knowledge of our customers' needs and concerns.

FEATURE	STANDARD	OPTION
Main on/off switch	■■■■	
Percentage timer	■■■■	
Manual or automatic start (by voltage)	■■■■	
Direction of rotation	■■■■	
Timed 3-second safety stop	■■■■	
External voltmeter	■■■■	
Hour meter	■■■■	
Auxiliary switch (e.g. fertigation pump)		■■■■
Stop and/or start by pressure		■■■■
Stop by temperature (<3°C)		■■■■
Auto Reverse/Auto Stop system		■■■■
End Gun control		■■■■



What is iControlLite?



iControlLite is the control panel designed to be an excellent solution by offering a Lite way to operate irrigation systems. It has been developed to work in systems with minimum functions that do not require complex operations.

It works perfectly in low-cost projects in which customers simply need to change the direction and speed of the machine, without any more advanced operations.

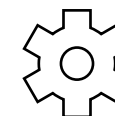
This panel is iControlRemote-ready, which allows the device to be installed easily and economically at any time and enjoy all the benefits of remote monitoring and control.



Offers growers an entry-level panel with a small investment



The panel is iControlRemote-ready



Requires little attention and minimum maintenance



Troubleshooting the panel is easy

iControlLite functions

In many situations it is not necessary to have a fully equipped panel, but rather just the basic options to meet watering requirements. In these cases, iControlLite is the perfect option.

iControlLite comes with built-in features including:

-  Direction of rotation (forward or reverse)
-  Control speed with the Percentage Timer
-  Voltage reading
-  iControlRemote-ready

Panels are mounted on a painted steel enclosure which can handle the most unfavorable weather conditions.



Why do you need iControlLite?

Its low investment cost and Lite operation make this panel an appropriate alternative for usage with circular pivots that only require the most basic operations of controlling speed and setting the direction.

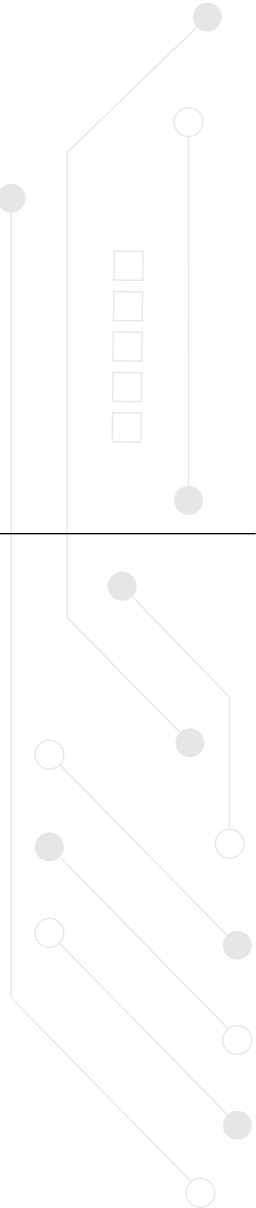
This panel is an ideal choice for replacing others in older pivots.

iControlRemote-ready

The iControlLite panel is ready to provide an irrigation solution through the same remote administration offered by iControlRemote.

It is the perfect combination of simplicity and affordability in managing irrigation systems remotely.

What additional functions can iControlLite gain when implemented with iControlRemote? Check them in the table on the next page.

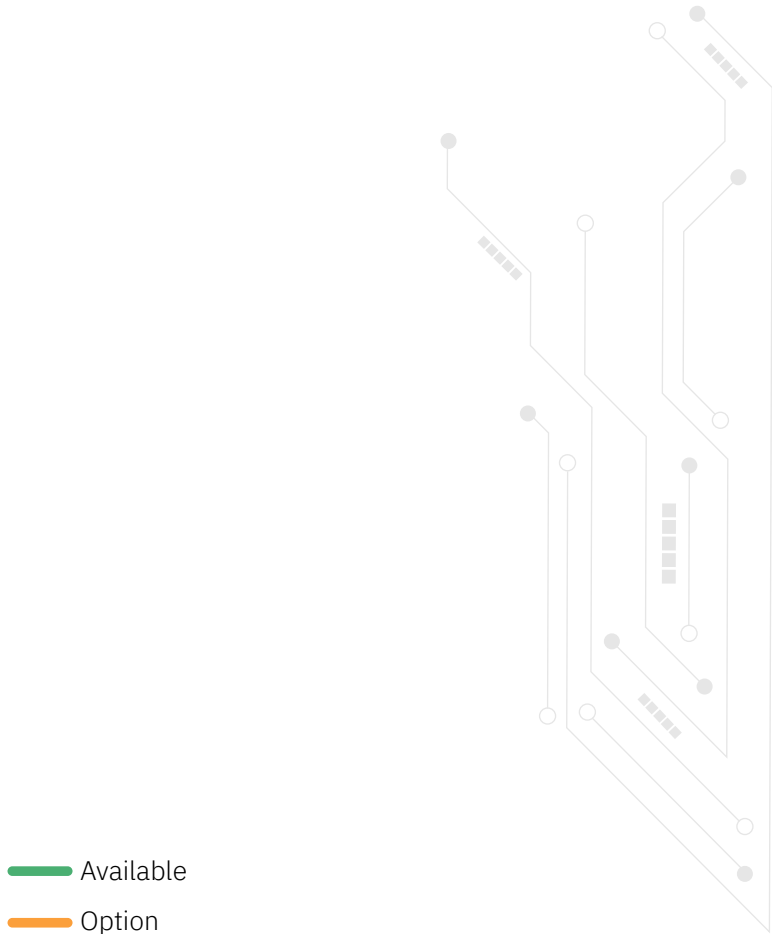


	iControl Lite	iControl Lite + ICR
CONTROLS		
Main on/off switch	Available	Available
Percentage timer	Available	Available
Water application (inches/mm)		Available
Number of speed sectors		6
Direction of rotation	Available	Available
Stop by pressure		Available
Stop by temperature (<3°C)	Option	Option
Start by power		Available
Start by pressure	Option	Available
Auto reverse / auto stop function		Available
Virtual barricades by angles		Available
Stop-in-slot		Available
End gun control	Option	Available
Control compass, encoder or GPS heading option		Available
Pump/valve control		Available
Fertigation control		
iControlRemote compatibility	Option	Available
Remote connection		3G/4G or wireless
Control by calendar		Available
Linear guidance		
MONITORING		
Pressure reading		Available
Voltage reading	Available	Available
Hour meter		Available
Water hour meter		Available
Field position		Available
SAFETY		
Timed 3-second safety stop	Available	Available
Low voltage protection		
Phase control (380V / 460V)		
Lighting arrestor	Option	Option
Ground fault protection	Option	Option

Available Option



iControl Panels Comparative Table:



Available

Option

	iControl Life	iControl Life + iControl Remote	iControl Standard	iControl Standard + iControl Remote	iControl Linear
CONTROLS					
Main on/off switch					
Percentage timer					
Water application (inches/mm)					
Number of speed sectors		6		6	
Direction of rotation					
Stop by pressure					
Stop by temperature (<3°C)					
Start by power					
Start by pressure					
Auto reverse / auto stop funtion					
Virtual barricades by angles					
Stop-in-slot					
End gun control					
Control compass, enconder or GPS heading option					
Pump/valve control					
Fertigation control					
iControlRemote compatibility					
Remote connection		3G/4G or wireless		3G/4G or wireless	
Control by calendar					
Linear guidance			RKT GPS (110v)	RKT GPS (110v)	RKT GPS (110v)
MONITORING					
Pressure reading					
Voltage reading					
Hour meter					
Water hour meter					
Field position					
SAFETY					
Timed 3-second safety stop					
Low voltage protection					
Phase control (380V / 460V)					
Lighting arrestor					
Ground fault protection					
DESIGN					
Touch screen					
PLC Display					
Time zone					
Metric/US units					
Stainless steel enclosure					
Log info					
UL listed					

iControl



MANAGEMENT

iTrack

What is iTrack?

iTrack is the ultimate tool for remotely monitoring your irrigation pivots or linears for smart irrigation without having to change your current electrical panel or make costly investments.

It allows you to follow the operation of your pivot 24/7 from any computer, tablet or mobile phone using a web browser.

iTrack is fully compatible with the iControlRemote APP application, allowing seamless integration and enhanced functionality for remote monitoring and control.



Features

- iTrack keeps you constantly informed on the following topics of the system's operation:
- Pivot / Linear Position (GPS based)
- Operation status:
 - ▷ Stopped/running
 - ↻ Rotation direction forward / reverse?
- Speed
- Detailed record of the actions performed and events / alarms.
- Alarms (notifications, WhatsApp, email, Telegram, text Message...)
- Water Pressure
- Hour counter



What are the benefits of using iTrack?

	Compatible with all electric pivot and linear brands		Provide real-time alerts for pivot activity and issues
	No need to change the existing control panel		Compatible with all iControl products
	Plug & play		Easy and intuitive application



iControl
Remote

Latest technology

iControlRemote is the state-of-art technology designed to easily automate and manage your irrigation systems remotely, without changing your existing control panel. This new tool lets you manage your system from any computer, tablet or mobile phone via the Internet using a standard web browser or the APP.

The innovative iControlRemote is installed inside the last tower box of your center pivot and, using a built-in SIM card which automatically selects the preferred network, connects your center pivot to our iControlRemote.com website.

Using the iControlRemote doesn't require you to change your existing panel nor to add another junction box next to the existing panel. Additionally, it can be used with basic panels or advanced panels whenever the panel includes the Auto Reverse function.

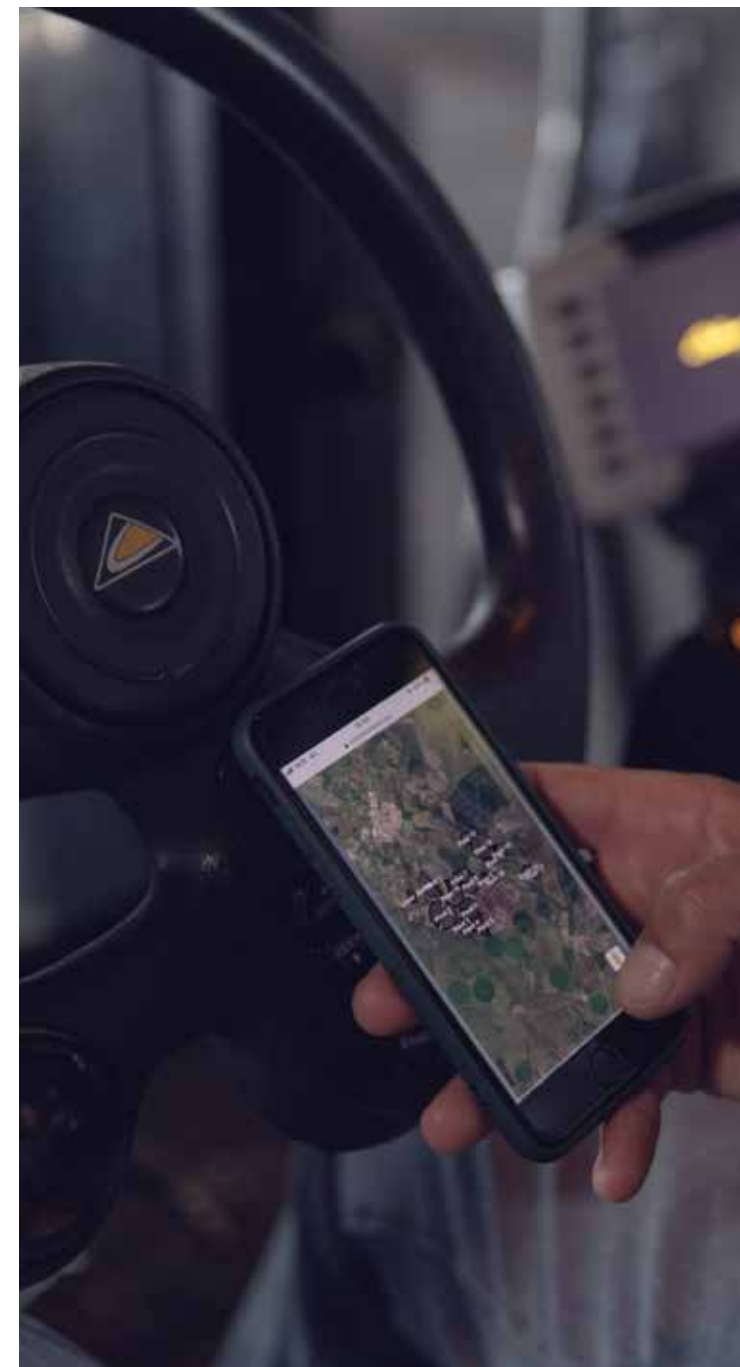


iControlRemote.com Platform

iControlRemote allows you to simultaneously control and manage your irrigation systems remotely including current end pressure, speed percentage, position, end gun, total hours running and total hours with water.

This intuitive platform provides real-time notifications and alarms using a quick at-a-glance format and also offers comprehensive historical data and graphical reports of your pivot operations to allow you to analyze your operation and intelligently plan your next irrigation cycle.

iControlRemote uses cellular or private radio network technology to manage your irrigational operations with just a click of the mouse



5 reasons to use iControlRemote

- 1

Precision irrigation increases yield while saving time and reducing the operational costs.
- 2

Manage and program the pumping and irrigation processes remotely for your entire farm from anywhere in the world using your computer, laptop or smartphone.
- 3

It can be used with all pivot brands available on the market.
- 4

It doesn't require you to change your existing panel.
- 5

Simple to install, easy to use.



Features

Controls

- Wired water control (ON/OFF)
- Start/Stop
- Forward/Reverse
- End gun ON/OFF
- Speed %
- Speed controlled by iControlRemote or Main Panel
- Fertigation

Programs

- Start/Stop programs on weekly calendar
- End gun control by sector
- Speed % and Water application depth controlled by sector and by running direction
- Auto Reverse or Auto Stop controlled by 2 angles with delay if with water
- Stop in Slot by Angle

Alarms

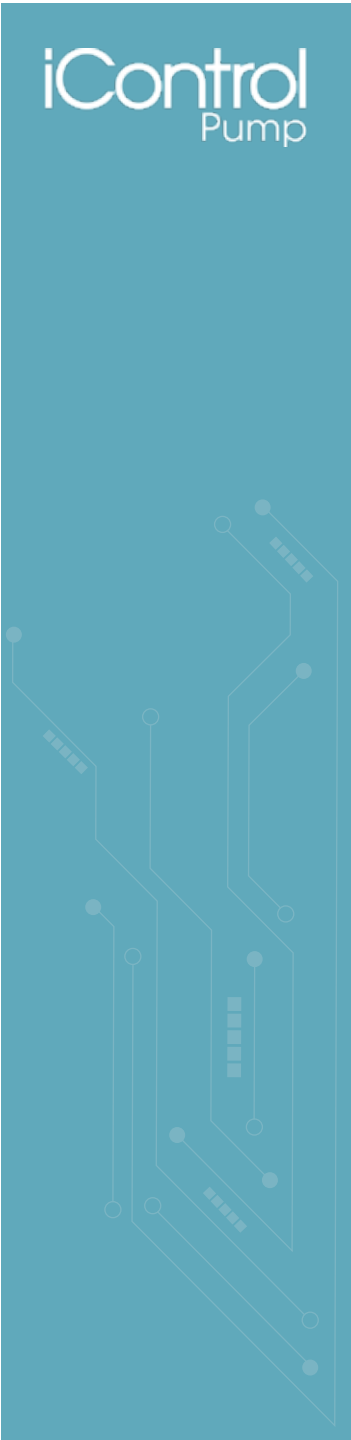
- Cable Theft Alarm
- Power lost
- Low pressure
- No water
- Status
- Direction change
- GPS connection lost

Monitoring

- Pivot/linear position over Google Maps
- Span position on Google Map
- Status of the machine (ON/OFF)
- Running direction
- End Gun Status
- Real Speed of the machine (%)
- Pressure at the last tower (pressure transducer is required)
- NDVI, NDVI and other satellite crop indexes
- Position by angle relative to North
- GPS signal
- GSM signal
- Total Hour Counter
- Water Hour Counter

Options

- Pressure transducer on the last tower
- Water control (ON/OFF)
- Solar panel for cable theft alarm off-season
- Soil Moisture
- Rain gauge
- Water flow metering
- Compatible with IProx product to control pump station, solid set sprinklers, drip Irrigation and other network valves
- Weather station
- Wireless Pump Station Control
- Pump's Dynamic pressure optimization (up to 30% energy savings)



What's iControlPump?

iControlPump is the automation and remote management tool for pumping that lets you manage your system from any computer, tablet or mobile phone.

Manage and program the pumping and irrigation processes in a centralized, remote way for all your property from anywhere in the world.

With iControlPump you can save up to 30% energy by adjusting the minimum pressure needed in your pump station in real time.

Associated with variable frequency drivers for your pumps, iControlPump provides a dynamic pressure set point to reduce the pressure and consumption of the pumps. A pressure optimization algorithm checks in each pivot if they lack or excess pressure to readjust the setpoint to their pumps.



Features

- Remote control and automation.
- Start/Stop for electric/fuel/solar pumps.
- Pressure set-point regulation.
- Pressure sensor reading.
- Water meter reading (flow and total volume).
- Control of two auxiliary devices (generator, fertigation, etc.)
- Solar powered as an option (allows the running of a generator to power the pumps)
- On-screen graphic display of the general status.



What are the benefits of using iControlPump?

- **Pumps complete remote** and automation management
- **Save up to 30% energy** by adjusting the minimum pressure needed in your pump station in real time
- **No dedicated wire is required** between pump and pivot

When to use iControlPump to save energy?

1 When the pivots are located kilometers away from your pumps.

In this case, the use of underground control cables between your pivots and pumping station for starting and stopping the pumps is no longer necessary with iControlPump. Communication now occurs through cloud services. This advantage brings economic savings in terms of materials and installation.

2 In terrains with slopes.

If a pivot is installed on a sloped terrain, iControlPump will adjust the pumping pressure to the level needed at the last sprinkler. The pressure read by iControlRemote at the last tower remains constant, reducing pressure during downhill pivot movement and increasing it during uphill movement. It's no longer necessary to maintain high pumping pressure when the pivot is in a low elevation area.

3 In hydraulic networks shared by multiple pivots.

When supplying a hydraulic network for several pivots, when they are not irrigating simultaneously, the flow in the network will be lower than the maximum flow for which the network wasdesigned. Hence, there will be less head loss in the pipes, allowing a reduction in pumping pressure and consequently lowering energy consumption. iControlPump pressure optimization algorithm detects this reduced head loss by reading the pressure in the irrigating pivots and ignoring the non-watered ones.

What's iControlSoil?

iControlSoil is a soil moisture monitoring device equipped with three sensors placed at different depths.

Provide accurate, real-time data, it allows farmers to understand the water content in the soil profile, optimizing irrigation practices.



What are the benefits of using iControlSoil?

	Water savings: avoids unnecessary irrigation and reduces consumption
	Energy savings: better control leads to less pumping and lower costs
	Sustainability: reduces chemical leaching into the subsoil and prevents surface erosion
	Data-driven decisions: reliable readings with clear visualization
	Customizable alerts: for excess or lack of moisture
	Long-lasting autonomy: up to 3 years of battery life
	Full connectivity: data available at your fingertips
	Fully integrated with the iControlRemote app

What is it used for?

- ❑ Monitors soil moisture in real time.
- ❑ Helps determine whether water remains in the root zone or is lost through percolation.
- ❑ Supports the analysis of irrigation efficiency.
- ❑ Provides key data to adjust irrigation volume and frequency.

How does iControlSoil work?

The system captures soil moisture readings every 4, 6, or 8 hours through high-precision sensors. This data is transmitted to the Gateway, which sends it to the cloud for real-time access.

Users can visualize trends, receive alerts, generate reports, and activate irrigation recommendations, tailored to soil type and crop needs, directly from the iControlRemote platform.

To enhance precision, the system can be optionally integrated with weather stations and satellitebased monitoring tools, such as NDVI.



iControlSoil is not just a moisture probe, it's a powerful tool to modernize agriculture and boost farm profitability.

Its precision, long autonomy, and user-friendly interface make it an essential ally for optimizing resources, reducing costs, and enabling more responsible and efficient irrigation.



What's iControlWeather?

iControlWeather is a professional weather station designed for smart agriculture. It provides precise and reliable environmental data to optimize irrigation, protect crops, and support agronomic decision-making.



What is it used for?

- ☐ Smart agriculture and crop protection
- ☐ Automated irrigation management
- ☐ Local climate monitoring
- ☐ Water resource optimization



What are the benefits of using iControlWeather?

- 

Higher efficiency: Optimize irrigation based on real-time conditions
- 

Better crop protection: Anticipate risks linked to wind, temperature, humidity, or UV exposure
- 

Informed decisions: Access reliable climate data for daily and seasonal planning
- 

Seamless integration: Fully compatible with iControl smart agriculture solutions

How does iControlWeather work?

iControlWeather measures key climate variables, (wind, temperature, humidity, rainfall, solar radiation, UV index, and evapotranspiration) through advanced sensors, including an ultrasonic anemometer and tipping-bucket rain gauge.

All data is collected in real time and transmitted via the iControl Gateway for remote monitoring and integration into smart agriculture platforms.

Key Features

- Ultrasonic wind speed & direction (0-60 m/s, 0-359°)
- Temperature and humidity with windchill and dew point
- Rainfall accumulation (daily, monthly, annual) and rain rate
- Solar radiation (pyranometer)
- UV sensor with real-time UV index (0-15)
- Evapotranspiration (ET) calculation
- Real-time data via iControl Gateway

ControlWeather is fully compatible with the iControl smart agriculture solutions. As a professional weather station, it provides accurate and reliable data to support irrigation decisions, crop protection, and agronomic planning. Data is transmitted in real time through the iControl Gateway, ensuring efficient connectivity and remote management.



iTrack

iTrack allows remote monitoring of irrigation pivots and linears without modifying the electrical panel o incurring high costs. Enables 24/7 remote supervision via web, with teal time alerts.

-
1. iTrack allows remote monitoring of irrigation pivots and linears without modifying the electrical panel or incurring high costs
 2. iTrack works with all electric pivot and linear brands, ensuring wide applicability.
 3. It requires no modifications to the existing control panel.
 4. The system allows simple Plug & Play installation for quick setup.
 5. It provides real-time alerts on pivot activity and potential issues.
 6. iTrack fully integrates with all iControl products for seamless operation.
 7. The application offers an easy-to-use and intuitive interface.

iControl Remote

iControlRemote is the state-of-art technology designed to easily manage irrigation systems remotely, without changing the existing control panel. It is installed inside the last tower box of the center pivot and it comes with a SIM card. icontrolremote.com website allows to control the current status of the systems as well as to manage the irrigation session remotely.

-
1. Saves your time, so it saves your money. iControlRemote controls the irrigation performance from any internet connected devise without the need to be in the field.
 2. One user can manage the pivot operations from the iControlRemote online platform to reduce labor costs.
 3. The incorporated pressure sensor continuously measures the pressure using this information to optimize the pumping performance and reduce the energy costs.
 4. Its versatility allows users to quickly adjust the frequency and amount of irrigating.
 5. It can easily be installed in any brand system without replacing the current panel or adding new spare parts, helping to reduce installation expenses.
 6. iControl Remote can also perform fertigation with your pivots reducing both water and fertilizer consumption, as well as improving the crop's productive capacity and profitability.
 7. The anti-theft system blocks the potential for cable theft and the unwanted expenses associated involved.
 8. Easy to use, anywhere and anytime.

iControl Pump

iControlPump is the automation and remote management tool for pumping that lets manage and control the system and the pumping station from any computer, tablet or cell phone.

-
1. Pivot and pumps with completely automated and remote management which saves time and labor costs.
 2. The incorporated pressure sensor continuously measures the pressure using this information to optimize the pumping performance and reduce the energy costs.
 3. Seamless connection between pump and pivot.
 4. Problem-free connection between the pumping process and the solenoid valves even on irregular land or where there is no mobile telephone coverage.

iControl Soil

iControlSoil is a soil moisture monitoring device with sensors installed at different depths, providing accurate real-time data to help farmers understand soil water content and optimize irrigation.

-
1. It saves water by preventing unnecessary irrigation and reducing overall consumption.
 2. It reduces energy costs by improving control over pumping operations.
 3. The system promotes sustainability by minimizing chemical leaching and preventing surface erosion.
 4. Farmers gain reliable data that supports informed decisions with clear visualization.
 5. Customizable alerts notify users of excess or insufficient soil moisture.
 6. The device provides long-lasting autonomy with up to three years of battery life.
 7. Full connectivity keeps data accessible at all times.
 8. iControlSoil integrates seamlessly with the iControlRemote app.

iControl Weather

iControlWeather stands out as a professional weather station tailored for smart agriculture, delivering precise and reliable environmental data that empower farmers to optimize irrigation, safeguard crops, and make informed agronomic decisions.

-
1. iControlWeather improves efficiency by optimizing irrigation based on real-time conditions.
 2. It enhances crop protection by anticipating risks related to wind, temperature, humidity, or UV exposure.
 3. Farmers make informed decisions using reliable climate data for daily and seasonal planning.
 4. The system integrates seamlessly with all iControl smart agriculture solutions.



Aisco Europe

Calle Playa de Riazor 22, 28042 Madrid, Spain
T: +34 913 519 891
info@aiscosolutions.com

www.aiscosolutions.com



Aisco Africa

Prima Vista, Central Road, Magda Square,
Floor No. 3, 6th October City, Egypt.
T: +202 38 89 6200 / +202 38 89 63001

www.aiscoafrika.com



Aisco America

6203 Woodlake Center, San Antonio, TX 78244, USA
T: +1 970-986-4637
info@pierceccorporation.com

www.pierceccorporation.com



Aisco MENA

2nd Industrial City, P.O BOX : 42852 Riyadh
11551, Saudi Arabia
T: +966 55 442 15291

www.alkhorayef.com

Aisco