

# Water & Irrigation Control systems

■ Take Control!





## Mottech Water Control & Management

Mottech, a member of the MTI Group, is a worldwide master distributor of Motorola's innovative, proven and reliable IRRInet platform. Mottech provides comprehensive, professional irrigation and water control systems for agricultural irrigation, municipal turf & landscape irrigation, and water distribution applications.

Our IRRInet systems rely on Motorola's unparalleled expertise to provide the robust communications infrastructure essential for remote management. Using a wide range of communication methods such as private radio, cellular, landline, fiber optic and Internet, Mottech can offer a communications solution for virtually any site, in any location. Mottech designs and implements optimized water control & management systems that offer our customers dramatic savings in water, energy and personnel costs – with unsurpassed functionality and fast ROI.

Our international network of subsidiaries, local offices and regional distributors provides ongoing support and service to our customers worldwide.



Agricultural Irrigation



Turf & Landscape



Water Supply

## The MTI Group



Established in 1970 MTI is a publicly traded company. MTI specializes in wireless communication with an emphasis on RF & Microwave providing solutions for civilian and military markets. MTI operates extensive international operations with offices & production lines in Israel, USA, Australia, South Africa, Russia and India.

## Platform



Motorola Solutions is a leading supplier of computerized irrigation and water control systems. Motorola has over 35 years of experience in developing, manufacturing, and installing computerized irrigation and water control systems worldwide.

In order to maintain its global leadership in the control and communication markets, Motorola and Mottech are constantly developing new and forward-looking products and systems while maintaining full compatibility with previous-generation products. Motorola operates to the highest standards in quality (ISO9001:2000), health and safety (OHSAS 18001), and environmental management (ISO 14001:2004) standards.

**IRRInet**  
for a greener world





# Mottech Edge



## Motorola - World leader in communication solutions

Motorola's IRRInet system is recognized worldwide as one of the leading systems available in the market today, offering advanced, forward-thinking, and robust irrigation controller solutions. Motorola's stringent standards ensure that Motorola controllers continue to work year after year even in the harshest conditions.

**IRRInet**  
for a greener world



## Complex, modular, large-scale projects

The IRRInet platform provides modular management systems for any deployment size – from small and medium systems to complex, large-scale projects that control tens of thousands of components (valves, water meters, sensors, pumps, etc.).



## Integrated solutions

We are proud of our unique ability to build water supply and irrigation control systems in which each element (valves, water meters, sensors, pumps, etc.) is fully and continuously synchronized with all the other elements.



## Remote sites with no communication infrastructure

Motorola systems use advanced communication networks to achieve effective data transfer over a wide variety of communication infrastructures. Using a range of communication technologies (radio, cellular, computer, line, etc.), Mottech's systems link even the most remote sites to the network using sophisticated networking features such as data store & forward.

Motorola's advanced capabilities in communication technologies allow our clients to establish a communication network even where no communication infrastructure is available.



## Multi-level management & control

Motorola systems are designed for applications with numerous simultaneous users and multiple user types. The system allows for access to information to be restricted to authorized and authenticated users through flexible multi-level password authorization control.



## Dramatic and significant water saving

Motorola's intelligent, cost-efficient irrigation systems use innovative water leakage detection methods and other advanced techniques to calculate and automatically change irrigation water quantities as required. Our systems dramatically reduce water and energy consumption while optimizing manpower and other resources.





## Agricultural Irrigation

Specifically configured to meet the needs of farmers, growers and agricultural organizations, this robust and reliable irrigation and water supply control system enables monitoring and control over an unlimited number of field valves, water meters, water pumps, fertilizers, sensors, etc.

### Features

- Remote and accurate irrigation
- Reduced water, time and energy
- Increased yield
- User-friendly management software
- Easy maintenance
- Ability to expand the system as required
- Real-time information on irrigation times, flow values, water quantities as well as alerts and reporting
- Complete synchronization between water supply and irrigation systems

### Monitoring & Control



Valves



Water meters



Weather station data



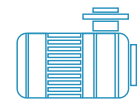
Fertilizer



Filters



Humidity sensors



Water pumps



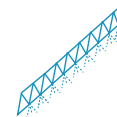
Water pressure



Water quality



Wind speed



Pivot center



External devices



Large scale and remote irrigation systems



Open fields, vineyards and plantations



Irrigation solutions for farmers, growers and agricultural organizations

### Our customers include:



ORANGE CO.  
USA



Fresh Choice  
Australia



Lipman Quality  
Farms, USA



ZZ2  
South Africa



Agrokasa  
Peru





## **Turf & Landscape Irrigation**

Mottech solutions improve turf and landscape irrigation management and control. Our systems ensure beautiful gardens and green parks while saving water, energy and manpower.

The Mottech system enables accurate irrigation, rapid detection of water leakages, water budget control and advanced scheduled reporting.

Designed to manage thousands of valves, water meters, sensors and head controls, the system can also receive data from third-party sources such as PLC and weather stations and automatically adjusting water quantity according to the daily ET.

### Features

- Suitable for municipal parks & gardens, sports arenas, road medians, and commercial areas
- Real-time control & monitoring system
- Reduction of water, energy, manpower expenses
- Fast ROI
- Easy and efficient operation via desktop & mobile phone
- Advanced data handling, trend analysis & reports
- Connectivity with external sensors and devices

### Monitoring & Control



Valves



Water meters



Weather station data



Humidity sensors



Wind speed



Water pumps



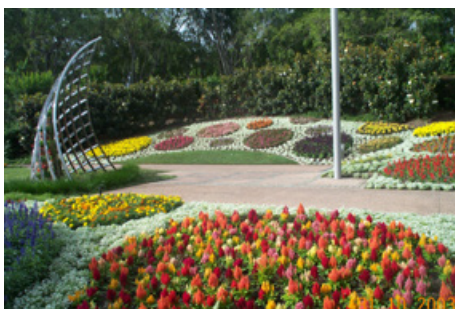
Water pressure



Lighting



Recreational sites



Parks



Landscaped areas

### Our customers include:



City of Plano  
Texas, USA



City of Calgary,  
Canada



City of Tel Aviv,  
Israel



City of Fiorano  
Modenese, Italy



City of Melbourne,  
Australia



## Water Supply

Rural municipalities and water corporations can automatically control and synchronize multiple water sources in response to changing water demands – efficiently and in real-time.

The IRRInet platform is the state-of-the-art solution for remote monitoring and control of water tasks. Its robust, built-in applications for water management systems, along with its distributed logic and control capabilities, means that each field controller can be systematically and remotely managed via the main control center.

The Mottech solution lets municipalities and water corporations achieve constant flow control aligned with changing demands, while monitoring water lines, reservoir levels and water quality.

### Features

- Total system solution for any scale operations
- Remote and automatic water system monitoring and control
- Ensures constant flow rate control – at the right flow and pressure values, at the right time
- Water supply and irrigation system synchronization
- Water line, reservoir level and water quality monitoring

### Monitoring & Control



Valves



Water meters



Filters



Water pressure



Water quality



Water pumps



Water level



External devices



Water line monitoring and control



Water quality monitoring and control



Reservoir level monitoring and control

### Our customers include:



Beta Complejo  
Agroindustrial, Peru



Sidra Catina  
Italy



Comunidad de regantes  
de sagunto, Spain



Consorzio Bonifica  
3 Agrigento, Italy



Afikey Emek Hefer,  
Israel



**MOTOROLA SOLUTIONS**



# The Motorola System



## Comprehensive, advanced and professional irrigation and water control management system

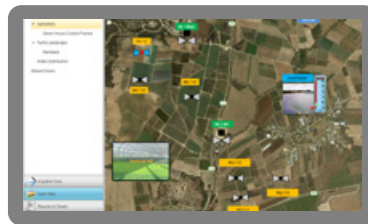
The Motorola IRRInet System is a cutting-edge solution for remote control and monitoring for irrigation and water applications. The system is designed to meet the rigorous demands of irrigation and water management applications in three main market segments: agricultural irrigation, turf & landscape irrigation, and water supply.

It provides:

- Dynamic, accurate and automatic allocation of water and irrigation quantities
- A reliable and proven system for both small- and large-scale systems
- Secure access for authorized personnel only
- Customized scheduled reports
- Real time alerts
- A variety of options to operate and monitor the system from anywhere, at any time



Customized User Control Panel

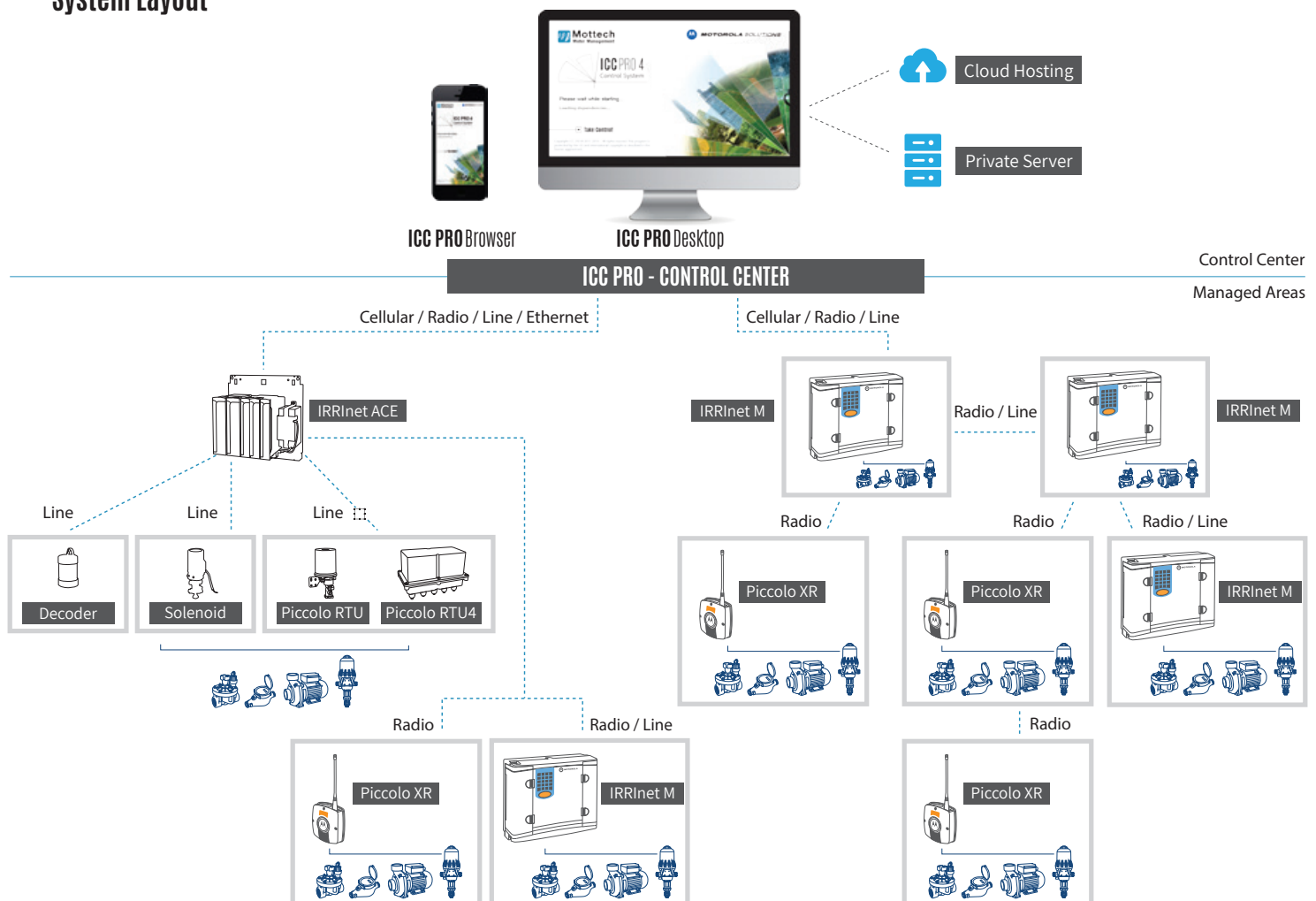


Virtual On-Site Interface via Google Maps



Charts & Reports

## System Layout



# System Components

## Management & Control

ICC PRO –Irrigation Control Center software

ICC PRO serves as a water and irrigation management center and is an integral part of the Motorola IRRInet system. The ICC PRO enables advanced control and monitoring using tables, graphs, reports, Google maps and more.

The ICC PRO software can be used on:

- ICC PRO Desktop: private server configuration or cloud hosting
- ICC PRO Browser: operate and monitor your system from anywhere at any time via your mobile phone



ICC PRO Software



ICC PRO Browser

## Controllers



### IRRInet Ace

Provides versatile, scalable solutions with a wide range of I/O modules, PLC interfaces and remote communication capabilities.



### IRRInet M

A powerful and intelligent RTU that supports both digital and analog I/Os as well as diverse remote communication capabilities.



### Piccolo XR

Piccolo XR is a compact, 2-way, low-power radio for communication distances of up to 2 km. With very low energy consumption, Piccolo XR supports data store & forward.



### Piccolo RTU

This top-of-the-line S.C communication solution is connected in a series on a standard cable for a distance of up to 10 km. The Piccolo RTU activates 1 latched solenoid and receives 2 digital inputs.



### Decoder System

The Mottech decoder system combines a 2-Wire Decoder and Solenoid in a single product that connects easily into most valves. It is ideal both for new irrigation deployments as well as retrofits.

### Piccolo XR8

Up to 8 Output's & 8 Input's

SOON!

### Piccolo RTU4

Up to 4 Output's & 8 Input's  
Now also available in improved plastic casing

NEW!

