



Introduction to Smart Irrigation

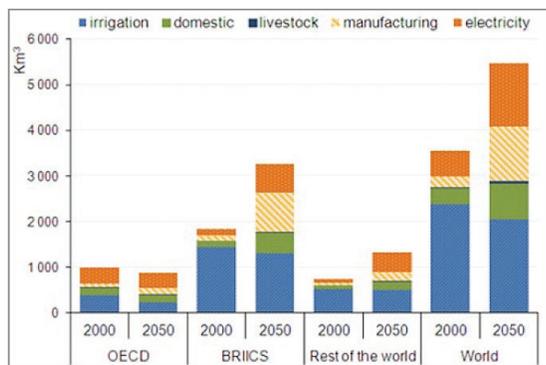
AERIS OFFERS UNMATCHED VALUE FOR THE IRRIGATION MARKET

The efficient management and conservation of water is becoming ever more important, whether it's used to irrigate farmlands, vineyards, or large urban landscapes. As water becomes increasingly expensive around the world, businesses recognize the necessity of achieving significant cost savings by conserving through smart irrigation.

Water costs will continue to rise as demand for its use increases. The many factors forcing water prices upwards were outlined in a recent report from the OECD: Irrigation costs and prices are rising “due to a combination of increasing scarcity, changes in public preferences regarding water allocation among competing uses, increasing budget scrutiny in the national and state legislatures, rising energy prices, and increasing awareness of climate change and the potential implications for rainfall and the availability of surface water resources.” In fact, irrigation is and will continue to be the dominant user of water around the world.

GLOBAL WATER DEMAND

Baseline Scenario, 2000 and 2050



SOURCE: OECD THE CHART OUTLINES OECD COUNTRY USE, INCLUDING U.S., EUROPE, JAPAN, AND BRICS COUNTRIES OF BRAZIL, RUSSIA, INDIA, CHINA, AND SOUTH AFRICA.

So-called “smart irrigation,” which enables more precise and efficient use of water and energy, offers the most viable option for water conservancy and reduction of operating costs for farming, industrial, commercial, and residential irrigation. According to the FAO, there are about 271 million hectares of irrigated land globally. The ICID estimates that 94% of this land is irrigated using basic surface irrigation via gravity flow methods. Only a few areas use any type of regulated sprinkler system to water crops.

In urban landscapes, an average commercial or industrial property uses over 730 gallons per day on landscape irrigation. Many properties overwater by as much as 60%, pouring hundreds of thousands of gallons of clean water into our streets and sewers.

Smart irrigation offers a cost-effective solution for this misuse of water. Aeris is a leader in cellular-based smart irrigation connectivity, working with more than a dozen manufacturers of irrigation systems. Irrigation equipment manufacturers select Aeris because we offer the largest cellular footprint in North America and 190 countries worldwide with a recorded 99.995% uptime year after year. We can ensure that you have a reliable connection to your irrigation systems every time — in even the most remote locations. And we can accomplish this while offering the lowest connectivity rates in the industry.

WHY DO THE LEADING IRRIGATION COMPANIES CHOOSE AERIS?

A single provider for all your connectivity needs

BROADEST COVERAGE — EVEN RURAL AREAS

Aeris is the only irrigation cellular service provider that offers both GSM and CDMA connectivity for 2G, 3G, and 4G LTE. Aeris is also carrier-agnostic. What does that mean?



In addition to our network, we have more than 500 carrier networks available to our customers. If our network does not reach a spot and another carrier does, we provide the strongest signal from the nearest tower, with no interruption in service. Moreover, we have a full stack of scalable technology solutions to support the entire lifecycle of your deployment from device deployment through data management.

LOWEST TOTAL COST OF OWNERSHIP

Through our flexible pricing and transparent management portal, Aeris ensures that you are never hit with “bill shock.” We give you complete visibility into the operation and billing of every device, no matter how many or how dispersed.

The cost of a smart irrigation solution can vary widely and mean the difference between success and failure for your customers. Too many cellular carriers make their profits from overages and extra fees for every service. Aeris believes that your costs should be predictable. We don't nickel and dime our customers – we provide all costs up front so that your program can maintain a predictable budget.

See how [Aeris](#) costs compare to the competition, click [here](#) to read an industry brief on Aeris' **Total Cost of Ownership**.

SCALABLE DEVICE MANAGEMENT PORTAL PROVIDES COMPLETE VISIBILITY

Using the AerPort management portal, Aeris clients have total visibility into every device and the data usage and billing for those devices. The AerPort dashboard allows our customers to manage, monitor, and troubleshoot devices to gain insight into their network operations in near real time. In contrast, Mobile Virtual Network Operators (MVNOs) need hours to register and analyze data going through the network.

OPERATIONAL SUPPORT ENSURES CONTINUOUS UPTIME

Aeris sells complete solutions for the irrigation industry, not just connectivity. Our support team is staffed exclusively with IoT/M2M experts, and when you need help, we are ready. Offered in three packages, Aeris Infinity Support™ is available five days a week with five minute response time, proactive monitoring, and issue identification. Powered by Aeris' proprietary and patented IoT technology stack, Infinity Support sets a new standard for smart irrigation.

Accustomed to the needs of the consumer handset market, traditional cellular operators do not have the processes and tools necessary for smart irrigation systems, where issues can be a complex mix of network, application, and device interplay. Unlike traditional carriers, we built our network and platform exclusively for Internet of Things and machine-to-machine connectivity and are able to make rapid modifications to meet our customers' ever-changing requirements.

FASTEST TIME TO MARKET

You need to get your irrigation systems up and running quickly. Aeris is an agile partner that will integrate with your product and sales teams. The Aeris team is organized to surround each client with a support and technical team for the entire lifecycle of your deployment. This means that you will have service when you need it and get things done faster.



Let's take, for example, device certification. Mobile Network Virtual Operators (MNVOs) and large cellular operators can take months to certify devices on a network. Aeris, on the other hand, guarantees the fastest and least expensive device certification in the industry. We know that you don't have time to waste waiting for your cellular carrier to get around to your devices. For one irrigation customer, Aeris charged \$3,500 for device certification that took two weeks to complete. A major carrier would have charged \$20,000 and required several months to complete the same task.

CASE STUDY: WEATHERMATIC

Situation: Weathermatic sought to expand industry-leading irrigation management services with reliable cellular coverage

Efficient management and conservation of water is paramount to economic viability. Garland, Texas-based Weathermatic stakes its reputation on the efficiency of its irrigation control management systems. Its sprinkler products, rooters, sprayers, valves, controllers, and water sensors are installed in more than 80 countries worldwide.

Challenge: Weathermatic needed up-to-date cellular connectivity

Weathermatic wanted to transition many of its sites from 2G GSM cellular services to CDMA because of the AT&T shutdown of 2G GSM services on January 1, 2017. Weathermatic also sought to transition from 2G to more advanced 3G operations where feasible. In addition, Weathermatic wanted to work with a provider that could support the rich, web-based management features offered by its SmartLink platform, such as its ability to manage new devices, ensure connectivity, and handle billing.

Solution: A smart irrigation partner that could guarantee reliable, easy-to-manage connectivity Weathermatic partnered with Aeris to replace its AT&T 2G GSM service with the Aeris CDMA network. The Aeris CDMA network increased both the download and upload performance for IP data and handles the growing usage of Weathermatic's SmartLink irrigation management features. In addition, Weathermatic uses Aeris' AerPort management platform to reduce costs and improve efficiency of operations. Aeris' scalable portal provides total visibility into the activity of every device and the billing associated with that device.

ABOUT AERIS

Aeris is a pioneer and leader in the market of the Internet of Things — as an operator of end-to-end IoT and M2M services and as a technology provider enabling other operators to build profitable IoT businesses. Among our customers are the most demanding users of IoT services today, including Rand McNally, Leica, and Sprint. Through our technology platform and dedicated IoT and M2M services, we strive to fundamentally improve their businesses — by dramatically reducing costs, improving operational efficiency, reducing time-to-market, and enabling new revenue streams. Visit www.aeris.com or follow us on Twitter [@AerisM2M](https://twitter.com/AerisM2M) to learn how we can inspire you to create new business models and to participate in the revolution of the Internet of Things.

Get in touch



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