

# REMOTE IRRIGATION AND WATER MANAGEMENT SOLUTION

Remote monitoring and automation of irrigation systems to optimise yields and conserve resources, wherever your farm is located

#### YOUR CHALLENGE

In order to maximise crop yields and quality it is vital that irrigation is scheduled according to the specific needs of the crop. Apply too little water and you risk missing out on valuable yield, but apply too much and you risk crop quality issues, soil leaching and runoff into local water bodies.

With an increase in the occurrence of extreme weather events such as droughts and growing regulatory pressure in some regions to reduce water use it is more important than ever for growers to correctly schedule irrigation events through the season.

Optimising irrigation and water management is not easy and depends on the accessibility of reliable data at the right time. As a result most growers find that the only way to schedule irrigation effectively is to visit the field regularly during the season, manually providing data inputs for scheduling programmes or water balance models. With many farms spread over large land areas this can soon become a costly and time-intensive approach, which does not offer the flexibility to respond quickly to changing environmental and crop conditions.

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## **OUR SOLUTION**

Inmarsat's Irrigation and Water Management Solution allows you to remotely monitor field conditions to accurately schedule irrigation events. Utilising the latest sensor technologies, the solution provides measurements of soil moisture and field level weather data, helping you make better informed decisions, faster. Our solution also allows remote visibility and control of your irrigation system, reducing the need to physically visit the field.

This means you can optimise crop vield, preserve water and comply with regulatory standards, as well as avoiding soil leaching and environmental contamination. These sensors are connected to the application by Inmarsat's highly reliable BGAN satellite network, offering up to 99.9% uptime. This means the system is guaranteed to work even without terrestrial internet, and you can access the data at all times. Secure and fully self-contained, the solution is powered with the aid of solar or wind energy, keeping you informed wherever you are. The solution easily integrates with your irrigation system to provide complete control over your water management.

## **CONNECTIVITY SERVICES**

- **BGAN**
- Long Range Wide Area Network (LoRaWAN)
- ISatData Pro (IDP)

# REMOTE IRRIGATION AND WATER MANAGEMENT SOLUTION IS FOR YOU IF...

- You farm over a large land area and want to save costs by reducing field visits to manage your irrigation
- You want remote, reliable data with no gaps to ensure precise irrigation scheduling to maximise yield and quality
- You farm in areas where cellular or fibre connectivity is unreliable or non-existent

## **BENEFITS**

- Optimise labour resources all the information and control you need to manage your irrigation remotely, saving you from deploying people to manually monitor fields
- Improve yield and quality use real-time data on soil moisture and field weather conditions to apply the right amount of water according to crop need
- Reduce nutrient losses and pollution - by having the right data to know when you don't need to irrigate
- Conserve water and comply with regulation

### **FEATURES**

- Compatible with all soil types and crops - choose your sensors
- Simple to set up download the app, set up 50 probes in two
- Instant internet connectivity to your field with our integrated remote connectivity unit
- Highly reliable satellite connectivity with government trusted, 99.9% network reliability
- **Cloud-based server** your data is available anywhere
- **Easily integrates** with automatable irrigation systems

#### WHERE WE DELIVER

Due to the unique nature of Inmarsat's geostationary satellite network we can deliver highly resilient, mobile communications services across the world. Global Xpress (GX), our Kaband service is delivered through our Inmarsat-5 (I-5) satellites, while BGAN is delivered, through our Inmarsat-4 (I-4) satellites.

Where required, our ecosystem of local

partners will deliver onsite warranty, support and repairs, and Inmarsat will ensure that all license and regulatory compliance will be in place.



I-5 F2 I-5 F4 I-5 F1 I-5 F3 I-4 and Alphasat coverage

Global Xpress network available over at least 99% of this area

This map depicts Inmarsat's expectations of coverage. It does not represent a guarantee of service. The availability of service at the edge of coverage areas fluctuates depending on various conditions. Fleet Xpress coverage March 2019.

FOR MORE INFORMATION

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