AQUAMONIX
Measure. Monitor. Master.

THE AQUAMONIX PIVOTMAX

Aquamonix has released the PivotMAX, an advanced management platform for large quantities of centre pivot and lateral move irrigators. With the ability to function with any brand or size of machine, the PivotMAX can interface with a wide range of ancillary equipment like pumps, gensets, valves, filters and fertiliser injectors. This platform can read and delay data from flow meters, pressure sensors, soil moisture probes, rain sensors, and weather stations. The PivotMAX is one platform for many applications.

SYSTEM ARCHITECTURE

Local Control

- Advanced local control with PivotMAX panel
- Actuate and sense peripheral devices using RainWAN wireless network
- Local connectivity to other panels or equipment can be mesh radio or cellular based

Cloud Based Control

- Global connectivity via cellular or sat link
- Access alarms and sensor data, upload irrigation schedules, remote start/stop

SCADA Network

- PivotMAX SCADA can be hosted on a local PC, or hosted on the cloud
- Advanced multi-site control and monitoring

92 Furniss Road, Landsdale WA 6065
intl +61 8 9477 1188
free call 1300 797 246
email sales@aquamonix.com.au

IRRIGATION AUTOMATION
WATER MANAGEMENT
REMOTE MONITORING

www.aquamonix.com.au

ADVANCED IRRIGATION MANAGEMENT

The innovative PivotMAX control panel features solid state technology and is designed to operate in the harshest of environments.

- Simple to use keypad, and daylight readable screen for ease of operation
- Ready for local connectivity via radio, cellular or sat link
- Advanced scheduling and control
- Auxiliary outputs
- Inputs ready for RainSwitch, flow meter or weather station
- RainWANready, actuate and sense peripheral devices using LoRa wireless network

WIRELESS CONNECTIVITY

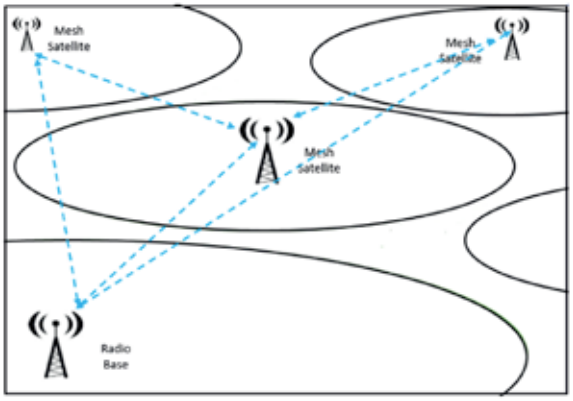
RainWANwireless Network

- Simple add on to any PivotMAX panel
- Enables wireless LoRa network around base
- Line of sight range is +8km
- Bi-directional, secure and encrypted
- Monitor simple data
- Flow
- Pressure and level
- Soil moisture
- Control basic equipment (DC latching)
- Valves
- Filters
- Pumps and Fert injection
- Relays
- No ongoing fees

A MANAGEMENT PLATFORM THAT CAN GROW WITH YOU

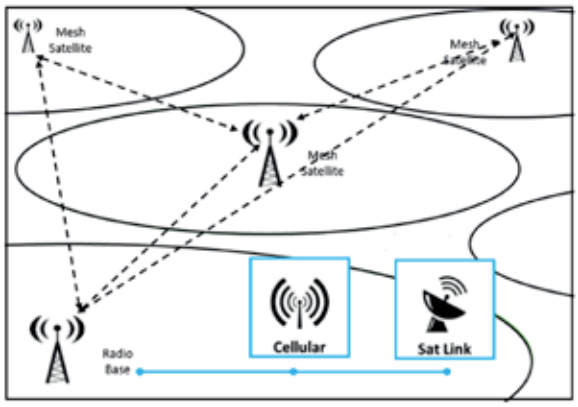
Communications Options - Creating a communications network

- The PivotMAX panel is communications agnostic
- Multiple communications devices can be hosted on a single panel
- Licensed radio bandwidth
- Unlicensed radio bandwidths
- Mesh radio network



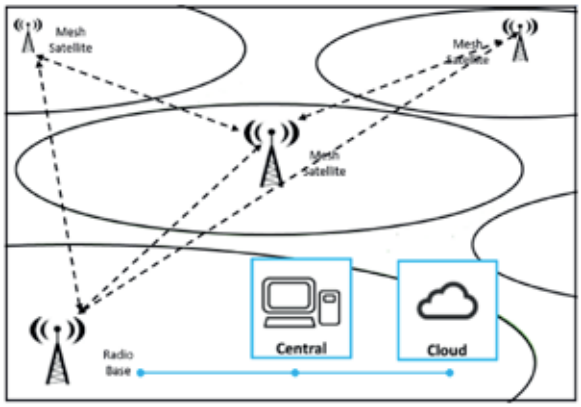
Creating a connection to the cloud

- Connecting to the cloud is as easy as installing a compatible, region specific device, including:
  - Cellular modems
  - Sat link modems
  - Ethernet
  - Fibre optic
- Connects to the Aquamonix web app



Networking your system to SCADA

- Every PivotMAX control panel can transform into a SCADA ready RTU with the installation of a firmware expansion
- Connects to Aquamonix SCADA
- Use DNP3 protocol, ideal for data capture and analysis
- Fully integrated system
- Manage pivots/laterals, pump stations, pipelines, water storage and distribution
- Monitor flow, pressure, soil moisture, weather stations and water quality
- Manage large quantities of sites with ease



92 Furniss Road, Landsdale WA 6065 | **intl** +61 8 9477 1188 | **free call** 1300 797 246 | **email** sales@aquamonix.com.au

www.aquamonix.com.au

07/2021

WHY STACKING COMMUNICATIONS MAKES SENSE

When choosing a communications method for your project, there are several factors to consider:

- Topology of the sites(s)
- Data load of the equipment being connected
- Capital costs of comms
- Ongoing costs of comms
- Stacking communications is often a cost effective solution for the variety of requirements of a complex system
- Connecting sensors and simple actuators can be achieved with data light IoT protocols, with low or no ongoing fees
- Connecting RTUs to a base over long distances requires data heavy comms, such as radio
- Connecting to the internet requires a site specific solution that is data heavy

	Level	Features	Costs/benefits
	Management platform, hosted locally or on the cloud.	Advanced management, full SDADA or simple app control and monitoring	May be subject to ongoing fees once installed.
	Internet connection, cellular, ethernet, sat link or WiFi.	Connects in-field system to the internet, or if locally hosted can be direct to the host computer.	May be subject to ongoing fees once installed.
	Local network, radio or radio mesh.	Ideal for data heavy connections, complex data or commands.	No ongoing fees once installed.
LoRa	RainWAN wireless network	Connects to the "things", data light and simple switching.	No ongoing fees once installed.

CONTROL PLATFORM

Category	Features	PivotMAX	PivotMAX Pro	SCADA
Configuration	Configurable alarm inputs	✓	✓	✓
	Programmable A/C inputs	✓	✓	✓
	Programmable auxiliary inputs		Two aux inputs	
	Programmable auxiliary outputs		Two aux outputs	
	Configurable US / Metric unit	✓	✓	✓
Control settings	Wireless remote pump/valve start	Optional		
	End gun control	On/off	Programmable zone control	
	Pump control	✓	✓	✓
	Pivot auto stop	✓	✓	✓
	Pivot auto reverse	✓	✓	✓
	Dead start generator control	✓	✓	✓
	Percentage speed control	✓	✓	✓
System features	Daylight readable backlit display	✓	✓	✓
	User friendly positive push keypad	✓	✓	✓
	DC, solar or AC power for RTU	✓	✓	✓
	Positioning options		GPS / Encoder	
	Integrated telemetry		✓	✓
	Mobile app available		✓	✓
	SCADA compatible			✓
	Trending analysis			✓
	DNP3 standard protocol compatibility			✓
Programming	Programmable system start-up		✓	✓
	Programmable park / stop in slot		✓	✓
	Position programmable		✓	✓
	Date/time programmable		✓	✓
	Stepped application control		✓	✓
Protection	Lightning protection	Optional lightning protection		
	Pressure start/restart	✓	✓	✓
	High/low pressure protection	✓	✓	✓
	Power auto restart	✓	✓	✓
	High/low voltage protection	✓	✓	✓
	Phase failure protection	✓	✓	✓
	High/low flow protection	✓	✓	✓
	Safety alignment fault/override	✓	✓	✓
Archives	Run time records	✓	✓	✓
	Flow/volume records	✓	✓	✓
Sensors	Pressure input	Transducer or switch		
	Flow meter input	4-20mA or pulse input		
	Rain gauge		Optical rain gauge	
	Weather station		Via MODBUS to RTU	
Enclosure	Stainless steel 500 x 500x 325mm	✓		
	Stainless steel 600 x 800x 325mm	✓	✓	✓