



AQUAMONIX
Measure. Monitor. Master.

WIRELESS IRRIGATION CONTROL

Hybrid Control System with RainWAN wireless node

The Aquamonix Hybrid Irrigation Controller has been specially developed to provide a simple yet smart solution for remote monitoring and control of on-farm irrigation systems.

Designed for Ag

The Hybrid Smart Irrigation Controller for Agriculture enables groups of valves to be programmed to operate together in shifts, and has pre-configured smart programs for the following:

- Looping
- Frost protection
- Heat protection
- Fertigation
- Filter flush
- Tank fill



Small or Large Networks

Hybrid Smart Irrigation Controllers can operate as standalone units or can be networked across multiple farms with either smart phone access or full remote PC control.

System Sensors:	
Pressure 1	541 kPa
Pressure 2	0 kPa
Flow 1	26.1 L/s
Flow 2	0 L/s
Fertigation Flow	0 L/s
Level 1	492 mm
Level 2	0 mm
Temperature	0 C

Pumps:	
Pump 1 Current	13 A
Pump 2 Current	0 A
Pump 3 Current	0 A
Pump 4 Current	0 A
Pump 5 Current	0 A

Water Usage:	
Month Total	0.00 kL
Year Total	1260.23 kL

Soil Moisture:	

STOP NEXT

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IRRIGATION
AUTOMATION

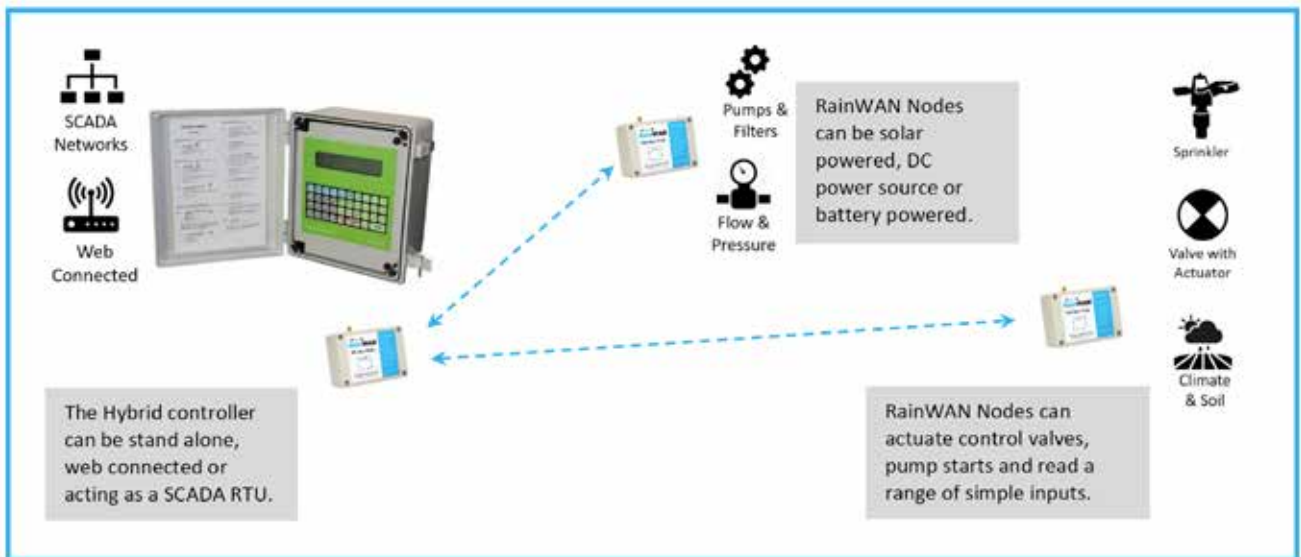


WATER
MANAGEMENT



REMOTE
MONITORING

www.aquamonix.com.au



FEATURES

- Low power
- Long range (+8km)
- Power input 12VDC
- Maintenance free
- Low cost
- Expandable format

Base Module

- Transparent link to controller
- Serial connection
- DIN mount

Remote Node

- Latching output (2 or 3-way actuator)
- Flow, pressure, rain-gauge and soil moisture input
- Pump start

RainMAN Micro Central

The Aquamonix RainMAN Micro Central allows you to monitor sensors and program irrigation scheduling. It's cloud based for remote access from any web enabled device.

WIRELESS VALVES, PUMPS, SENSORS

The RainWAN Wireless Nodes for Hybrid are available as single station only, single station/pump start with sensor input, or 2 stations with multiple inputs. Sensor inputs can be used to measure flow, pressure, level, temperature, soil moisture, rainfall, and humidity.

RAINWAN WIRELESS CONTROL SYSTEM

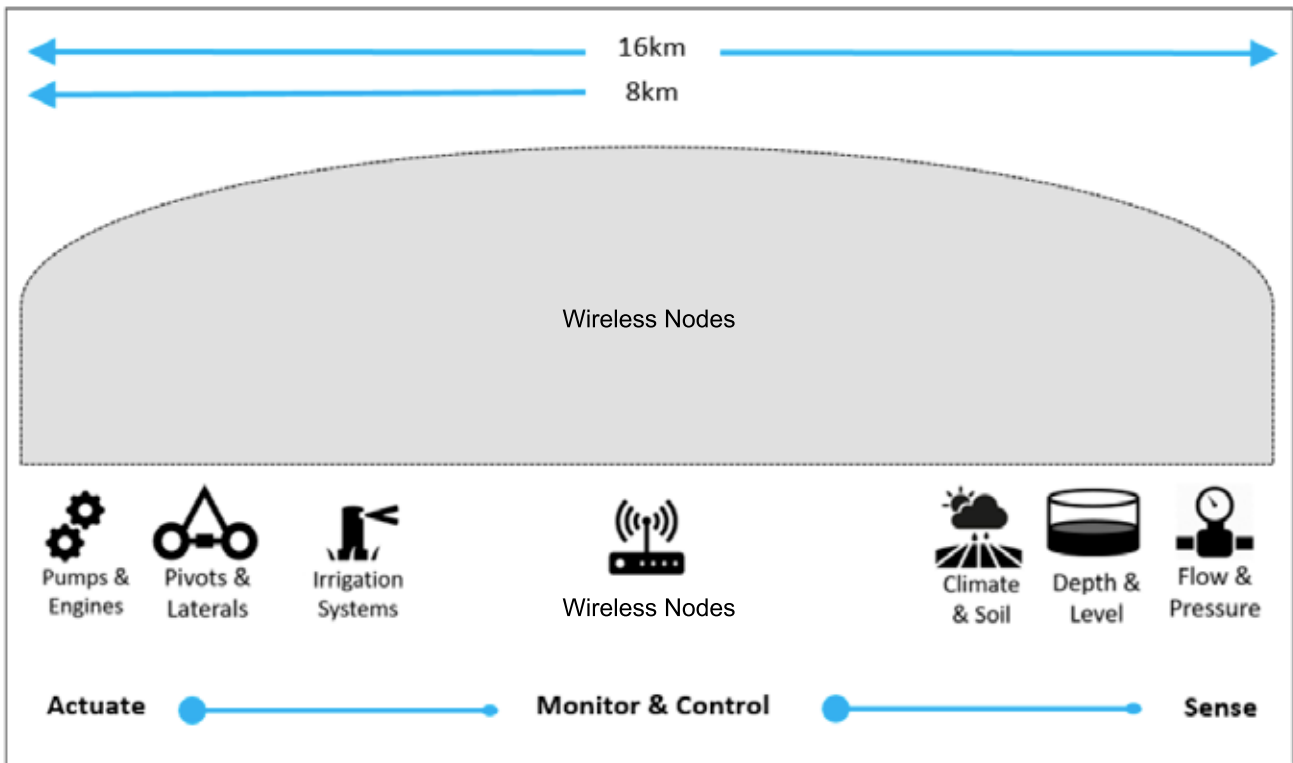
The RainWAN provides a transparent link for the Hybrid Control system. It performs an advanced level of control and monitoring over large quantities of actuators and sensors in the field.

SMART BASE STATION

The Hybrid Smart Controller base station has 16 local outputs to control pumps, filtration, fertigation, and wired control valves. It has 8 digital inputs and 4 analogue inputs to monitor flow rate, line pressure, tank/dam level, pump faults, soil, and climate sensors. Expansion packs are available to accommodate additional wired valves or inputs including 2-wire/decoders. The Hybrid base station is configured for standalone operation or web enabled ready for connection to the RainMAN Micro Central.

Hybrid Control System with Wireless Nodes

Utilising wireless nodes are an innovative new way to sense and actuate devices via an encrypted, localised network that offers all the functionality of a common Wi-Fi like environment. It features low power requirements and operates over long distances. Our Hybrid Control System with wireless nodes is a localised wide area network. It uses a proprietary encryption to ensure secure communications between a compatible base station and numerous field devices and is suitable for M2M small packet data applications.



HOW DOES THE WIRELESS NETWORK OPERATE?

- Private and secure Wide Area Network (WAN)
- Range of 8km +/-
- Standalone network
- Bi-directional (monitor and control)
- Low power
- Low cost
- Powers the IoT sensors and actuators

WHAT IS A RAINWAN WIRELESS NODE?

RainWAN is the next generation of wireless valve control and sensor input. Using low power LoRa radio, it still achieves long range (+8km), can transfer meaningful quantities of data in both directions, and most importantly, is sufficient for control applications.



STANDARD HYBRID CONTROLLER CONFIGURATIONS



STANDALONE



Stand Alone

- Hybrid controller
- Grouping firmware
- 16 local outputs
- 96 maximum stations, with RainWAN Base not including modem
- 8 digital inputs
- 4 analogue inputs
- IP66 PolyCarb enclosure, includes Base Antenna Kit




WEB READY



Web Connected

- Hybrid controller
- Grouping firmware,
- 16 local outputs
- 96 maximum stations, with RainWAN Base and cellular modem fitted
- 8 digital inputs
- 4 analogue inputs
- IP66 PolyCarb enclosure, includes Base Antenna Kit

Standard RainWAN Installation Formats

BARE NODES	SOLAR POLE MOUNT	IP66 ENCLOSURE
 <p>Bare node kit Includes,</p> <ul style="list-style-type: none"> • Bare node in IP64 case • 240/12DC power supply • Whip antenna (loose) • Input/output cables 	 <p>Solar node kit Includes,</p> <ul style="list-style-type: none"> • Bare node in IP64 case • Solar panel and battery • Whip antenna (fitted) • Input/output cables • Pre-fitted in pole mount enclosure 	 <p>IP66 node kit Includes,</p> <ul style="list-style-type: none"> • Bare node in IP64 case • 240/12DC power supply • Whip antenna (loose) • Input/output cables • Pre-fitted in IP66 Poly-carb enclosure <p>**Optional latching relay**</p>