

# Wireless Water Level Monitoring

Check levels in an instant







# Keep your No. 1 asset flowing

A complete, simple solution for the monitoring and management of water and other fluids.

Extremely easy to operate and install, the system provides peace of mind that there is water available. It helps prevent water outages by providing early warning if levels start to fall significantly. An optional wireless pump controller can also be added to ensure tank levels are maintained

#### Section 1

Product overview

Pg 4

#### Section 2

Increasing the range - antennae options

Pg8





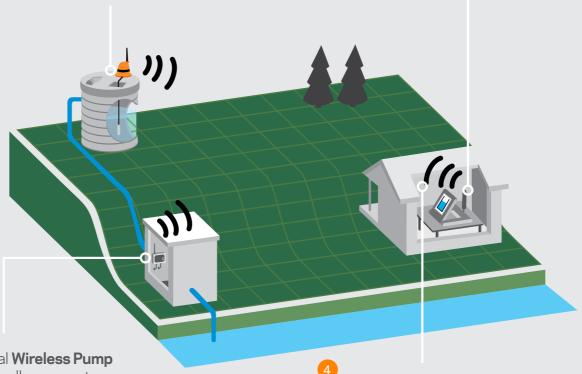
# How the system works

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Accurately measures the liquid level in the tank based on pressure, and sends this information wirelessly from the **Tank Unit** to the Display Unit.



The **Display Unit** shows in an instant how much liquid is left in the tank, saving time by eliminating the need to visit the tank/water source. It can be placed in a convenient location on the farm ensuring all staff can check the water status.



An optional **Wireless Pump Controller** allows remote control of the pump to ensure tank levels are maintained as required.

The system's range can be extended with the use of **Ultra-Long Range Antenna** options or by installing an Active Repeater.

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## Display Unit

### Shows the tank information at a glance

- Desktop or Wall Mount options available
- Easy to operate high res 2.8" colour touchscreen display
- Used to set up and control the Wireless Pump Controller
- Up to nine Tank Units can be monitored via one Display Unit
- Sold separately or as part of one Tank Starter kits



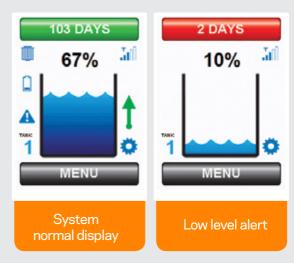
Desktop Touchscreen Display option



Wall Mount Touchscreen Display option

#### **Display Screens**

As well as clearly showing day to day tank levels, the display will also alert the farmer to low levels and abnormal usages, so leaks can be spotted early before they become a problem.





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## Tank Unit

# Wireless Pump Controller

# Transmits the data measured by the sensor to the display unit

- Solar powered no need to change batteries
- High performance multidirectional antenna up to 4km / 2.5 miles line of sight (can be upgraded to increase range up to 10km / 6 miles)
- UV resistant marine grade plastic
- Connect up to nine Tank Units to one Display Unit

# Remotely control your pump to ensure tank levels are maintained as you choose

- Automatic control using wirelessly transmitted tank level readings
- Alternatively can be used as a simple manually activated wireless control system
- Pump status is available on the Display Unit
- Multidirectional antenna included
- Automatic stop feature in case of abnormal usage
- Set the on/off period for the pump
- 12V battery powered option also available

## Level Sensor



#### Measures liquid level in the tank

- Super high quality Marine Grade (316) stainless steel construction
- Ruggedised polyethylene cable
- Precision locking waterproof connector
- Automatic calibration
- 4m/13ft cable (other cable length options available)



# Antenna Options for Wireless Water Monitoring System

Gallagher offer a number of antennae systems for farmers that need to increase the read range of their Wireless Water Monitoring System.

Use the following pages to find the answers to common challenges like:

- longer distances between monitoring location and tanks
- multiple tank monitoring
- line of sight issues between monitor and tanks.



#### Step 1

Use the diagrams on page 12 to find the setup that most closely resembles the challenge - A - F

### Step 2

Then use the product list on page 14 opposite to determine the products needed for the system - 1-9

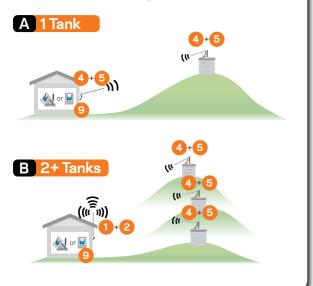


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#### Line of sight

Maximum range is 4km, if there is genuine line of sight. Anything in the way (e.g. hills/trees/buildings/vehicles/walls) will reduce distance. To extend range up to 10km

- Point to point use a Directional Long Range Antenna at both ends
- Must be directly pointing to far location



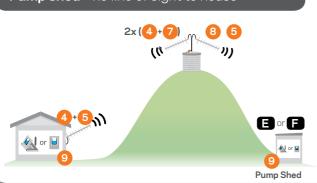
#### No line of sight

If there is no line of sight, to provide a stronger radio signal it is often beneficial to install an Active Repeater on a hill top. Choose a location that has clear line of sight to the source and the destination (tank and the farm house).

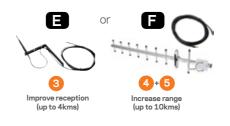
- Only one repeater can be used in a system (not designed to be daisy chained)
- Needs to face north so that the solar panel can keep the battery charged.



### Pump shed - no line of sight to house



Two base unit systems are needed. One automatically maintains tank level (pump shed to tank) and the other monitors tank level to confirm system is working correctly (tank to house).



#### Multi Direction Antenna Systems





Multi directional antennae send/receive signals to/from multiple monitored locations and base display

Up to 10km



**High Power External Multi Directional Antenna** 

G98506



Cable

G98604 (4m) G98605 (10m)

A long life weatherproof antenna designed to be mounted externally to maximise the range and reception. Comes complete with brackets and hardware.



For use with 1 Multi directional with SMA male to N female, 3u" gold plated connectors.

**External Multi** Up to 4km **Directional Antenna** 



External mounted option for standard distance installations that require improved reception to the base unit, especially useful for corrugated iron pump sheds.

#### Single Direction Antenna Systems







A B D F

Single direction antennae send/receive signals to/from a single monitored location.

Up to 10km



**Directional Ultra** Long Range Antenna G98500



Made from the highest quality weather resistant materials, this high performance antenna maximises range to a single location

Cable

G98602 (4m) G98603 (10m)

**Active Repeater** 



For use with 4 Directional Ultra Long Range High Performance low loss RG58U cable with SMA to SMA, 3u" gold plated connectors.

### **Active Repeater**





Can be utilised to carry the signal over an obstacle preventing line of sight. Only 1 Active Repeater can be used per Water Monitoring System. Tank unit and display only.

#### Other



0.5m Cable

G98601

G98512



For use with 4 Shorter length to ensure minimal signal loss between antenna



Cable splitter

G98701



For use in systems that require two Directional Antenna - splits the transmission signal in half

**Wall Mount Adaptor** 

G98017

For use with Wall Mount Display Units to connect to Antenna cable

#### SYSTEM/PRODUCT OPTIONS:



#### One Tank System Desktop Display

G98131 Includes Desktop To

Includes Desktop Touchscreen Display, Tank Unit, Level Sensor



#### One Tank System Wall Mount Display

G9803

Includes Wall Mount Touchscreen Display, Tank Unit, Level Sensor, Wall Mount Power Supply



#### Tank Unit & Level Sensor

G98232

Includes Tank Unit. Level Sensor



### Wireless Pump Controller

#### **SPARE PARTS:**



#### **Power Supply**

Desk mount po supply

#### Standard Antenna

Antenna Standard Multi Directional 398508

#### Display Antenna

Desk Mount Antenna

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