



- Wireless Water Level and Consumption Monitor -

Ripple sense is a wireless water level and consumption monitor that allows farmers to accurately track their livestock's water supplies via a smartphone based application. The system uses an ultrasonic sensor to track changes in water levels in both feeding troughs and reservoir tanks. This information is packaged and sent over a network to servers where the information will be interpreted and then displayed in a coherent and user friendly manner within the application for the user.

The aim of Ripple Sense is to reduce the guesswork, cost and time that is involved with farmers manually monitoring their livestock's water supplies. It also provides peace of mind and protection to farmer's livestock from lack of water intake. The product is aimed to be used in hotter climates in remote areas where farmers use reservoir tanks to feed drinking troughs for their livestock. In the case of reservoir tanks that are manually refilled the unit will measure the water levels and display the change in level over time (consumption). This will allow farmers to plan for refill trips but also gauge how much water they are consuming. Ripple Sense can also be used on automatic mains fed water troughs. In this case Ripple Sense will ensure the tank/trough is being refilled at the correct rate and to the correct level. If the time taken to refill the trough increases for example, the unit will send a warning through the smartphone application notifying the owner of a potential leak. Similarly, this will be the case if the trough is not being refilled fully.

The application will have two configurations for interpreting the information; one for reservoir systems and one for mains fed systems. This will be an option for the farmer to select in the application when a new sensor is being setup.

