



The Harvest system is an internet based (IoT) remote monitoring solution covering a range of applications. In most situations, our systems are totally standalone utilising solar power and the cellular network to send data to the Harvest servers. Wireless UHF radio "remotes" can also be used to collect data from around the property. The information can be viewed using any computer or smartphone.

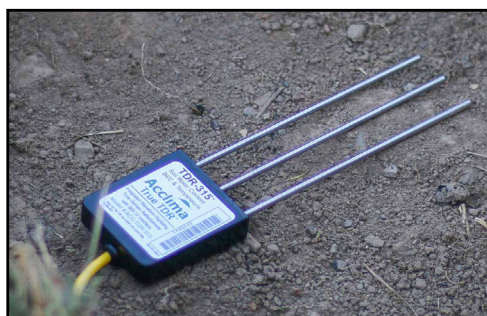
Note: all the documents mentioned in this info sheet can be found by using the search bar on our web site harvest.com, or by visiting harvest.com/support.

Weather Monitoring/Localised Forecast

The base station is typically set up as a weather station however weather sensors can also be connected to wireless remotes at other places on the property. Parameters that are typically monitored include:

- Air Temperature
- Relative Humidity
- Rainfall
- Wind Speed and Direction
- Solar Radiation (for Evapotranspiration calculation)

For any systems with weather sensors we can provide a localised forecast, based on the readings from your sensors matched against a large network of weather stations and weather satellites.



Soil Moisture Monitoring

Soil moisture/temperature sensors can be used to collect reliable real-time soil moisture readings from around the farm. We are now predominantly using Acclima TDR sensors at varying depths for multi-level readings. The Time Domain Reflectometry technology provides excellent accuracy and precision in comparison to other sensor technology options available. The sensor design also allows for very little soil disturbance.

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Our add-on service allows for calculation of irrigation required (mm). You can read more about our soil moisture monitoring in our document [How to use soil moisture readings for irrigation](#).



Irrigator Monitoring and Failsafe

Our Effluent Irrigator Monitor features a design refined over 5 years on dairy farms and offers a market leading monitoring and control solution, including automatic pump shutoff and alerts (see our [Effluent Irrigator Monitor brochure](#) for a list of features). The unit on the irrigator uses UHF radio to communicate with a second unit at the effluent pump which controls the pump.

We also have packages available for pivot/lateral/hose reel irrigators.

Water Monitoring

Harvest devices can provide real-time readings and configurable alarms for water and irrigation systems. Common applications include:

- Flow meters (optional transfer of data to council)
- Water tank level
- Well/bore level
- Pipe pressure
- Pump control

Alarms (txt message, email, or voice call) can be set up for any of the measured values e.g. max daily water usage exceeded, low tank or bore level etc. Remote control can be a secure virtual switch on the Harvest web page or based on a measured value e.g. when max daily water usage is exceeded, pump shutoff activated.



Electric Fence Monitoring

Made to remotely monitor fence voltage, it allows you to check the status of your fence from any computer or smartphone.

Available as a standalone package or as part of a full ITU G2 system.

Milk Vat Monitoring and Alarms

Sensor options:

- Vat Temperature
- Vat Stirrer Status
- Vat Inlet/Outlet Tap
- Vat Level
- Cooler Plate In/Plate Out Temperature
- Boiler Temperature

Typical alarms:

- Milk temperature (vat)
- Stirrer failure
- Outlet tap open during milking
- Vat has not been Clean In Place for X hours
- Boiler not reached 65°C in 24 hours
- Hot water entering vat
- Milk Leaving Cooler at x°C
- Power Failure

Operating Fee

Each Harvest system has an operating fee (billed annually in advance) which covers the following:

- Data transferred from the system via a cellular network to the Harvest servers
- Hosting of data on the Harvest website (available in a graphical format or downloadable CSV format)
- Processing configurable automated alarms (e.g. effluent failsafe activated, milk vat temperature etc.)
- Optional transfer of data to third party providers (e.g. consent data to councils or weather data to consultants)
- Dedicated support team available via 0800 number and email. Emergency 24hr 7 day a week support available

Repeaters and control solutions have additional fees due to the additional ongoing support they require.

