

Harvest System for Vineyards/Orchards



The Harvest system is an internet based online (IoT) 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 on our website www.harvest.com

Weather Station/Frost Alarms

The base station is typically set up as a weather station that gives hourly updates to a Harvest web page. Once the temperature drops below your customisable frost threshold, text and voice call alarms are triggered and the web page updates every minute. Parameters that are typically monitored include:

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

Sensors can also be connected to wireless remotes at other places on the property.



Wireless Temperature Monitoring

Wireless remotes can be used around the property to create a network of temperature sensors to cover particularly frost prone parts of the property. If any of these sensors drop below your frost alarm thresholds then frost alarms and minute updates will be triggered. Frequent updates in frost conditions is particularly helpful for measuring frost fighting effectiveness.



Soil Moisture Monitoring

Soil moisture/temperature sensors can be used to collect reliable real-time soil moisture readings from around the property. We are now predominantly using Acclima TDR and TDT sensors (see our [soil moisture brochure](#)) at varying depths. You can read more about our soil moisture monitoring in our document [How to use soil moisture readings for irrigation](#).

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. if block temperature drops below X°C, start frost fighting pump.



Wind Machine Monitoring

Wind machine monitoring can be retro-fitted to provide online diagnostics and automated alarms for startup failure. Parameters that are typically monitored are:

- Status (on/off)
- Battery voltage
- RPM of the shaft
- Wind speed

Once your customisable frost alarm thresholds are met, the data updates every minute.

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. frost alarms, daily water allocation met 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.



HARVEST.com
Login Options

Country New Zealand
Region Marlborough
Sub-Region Tohu Wines
Unit Awatere

Home
Site Info

Tohu Wines Awatere
SID:3573 HSN:10387 USER:Guest LAST DATA:Thu Sep 28 2017 12:30:01 GMT+1300 (New Zealand Daylight Time) - 8:18 minutes ago

Graphs
Harvest News

All
Temperatures
Engines
Weather
Water

Temperatures

River ABC Class (°C): 13.8
min 7.5 avg 9.6 max 15.0
GDD 0.0 RCU 0.0

AWA CH R1435 (°C): 12.6
min 7.8 avg 9.8 max 14.3
GDD 0.0 RCU 0.0

Pond C Class (°C): 11.8
min 7.5 avg 9.6 max 15.6
GDD 0.0 RCU 0.0

Riesling R1160 (°C): 12.8
min 6.9 avg 9.3 max 14.8
GDD 0.0 RCU 0.0

Puke SB R-1017 (°C): 11.9
min 6.4 avg 9.1 max 15.0
GDD 0.0 RCU 0.0

← Thu 27 Sep 2017 Thu 28 Sep 2017

Advanced Navigation

South Island Chill
Thurs 6th July 2017

The frost has once again hit hard overnight with 37 units in Otago reading below -5°C and 39 units in Marlborough reading below -3°C.

New Cloud Servers

You may start noticing big changes to the way the website looks as we are gradually migrating sites over to our new system in the cloud. The migration is by region and once migrated you will automatically be directed to your system on the cloud. If you have any queries please contact our support team.

Lowest Overnight Temperature
Tues 2nd May 2017

Winter frosts have hit Otago, NZ hard today. The lowest overnight temperature recorded across more than 2000 Harvest weather stations was -7°C recorded in Cromwell at 7am. Many stations in Otago recorded around -5°C.

Harvest Tip #5

Data from your Harvest system can be downloaded from your webpage in text or CSV format. Click [here](#) for more details and past tips.

Earthquake Slip Monitoring

Check out this short video about some monitoring gear Harvest installed at Goose Bay, Kaikoura, NZ to monitor slips caused by the November 2016 Kaikoura 7.8 magnitude earthquake.