



INTERNET SOLAR POWERED FROST ALARMS AND WEATHER STATIONS

The Harvest System is a complete internet based solar powered weather monitoring solution. The system can be placed anywhere in the world where there is GSM or 3G cell phone coverage and it will report real time data through to the Harvest website.

To see live online data check out www.harvestalarms.com There are currently over 700 systems on the Harvest network across ten countries worldwide.

Key Features

Online Data. At any point in time you can see your weather data live on the internet or your smartphone. The temperature trends and history are visible at a glance. If set up as a Frost Alarm then under non-alarm conditions the system reports to the web site every hour with 10 minute logs. When the temperature drops below 3°C (37°F) the system reports back new data every minute.

The daily weather data and statistics enable remotely located owners and managers to see what is happening at their property.

Wireless Temperature Sensors. The system supports 20+ wireless temperature sensors which can be placed up to 1-2km (0.6 -1.2 mile) from the base unit (no cables to mow or prune!). Wireless sensors can be installed in minutes and are easily relocated.

Alarms. The system sends up to four messages (text messages, voice messages or emails) when the temperature drops to the user defined alarm level. Other alarms can also be configured; a second temperature alarm, heat alarms, wind machine start/stop, pump run and battery voltage alarms, etc.

Frost Fan Monitoring. Many vineyards and orchards that have Harvest systems are now monitoring their frost fans. In some cases the information gathered from monitoring usage hours is part of consent conditions. The system can currently monitor engine running, battery voltage, and fuel level. Alarms can also be sent out when the engine starts or stops.



Frost sprinkler monitoring The Harvest system can monitor water pressure in the outlet manifold and send alarms if the pressure is too high (blockage) or too low (burst pipe).

Growing Statistics. The system can calculate Growing Degree Days for your site during growing months, Richardson Chill Units during the winter months, Botrytis risk, Powdery Mildew risk, Dew Point, Wet Bulb temperature and Evapotranspiration (ET).

Weather Monitoring. The addition of humidity, wind speed and direction, rainfall and soil moisture sensors help to give a complete picture of weather conditions. Wind data with calculated average and gust speeds can be very useful for spraying contractors. Soil moisture is highly beneficial to those who wish to manage irrigation. Other sensors such as solar radiation, leaf wetness and soil temperature are also available. Monitoring of third party sensors such as flow meters and well depth sensors can also be read.

Soil Moisture. Soil moisture monitoring is becoming an integral part of water management. Solutions for monitoring start with the very cost effective yet accurate Decagon 10HS and move through to the Aquaflex and Sentek sensors.

Harvest have the following three options available for soil moisture monitoring:

- Decagon 10HS: sample size of 1 litre averaged between two 10cm probes
- Aquaflex SI.99: sample size of 6 litres averaged along a 3m sensing “tape”
- Sentek EasyAg: samples at 3 or 5 levels 10cm apart using a vertically inserted sensing “rod”

Irrigation Monitoring. The Harvest Frost/Weather System can also be used to meet consent requirements for water use logging and telemetry. The addition of inputs from flow meters and/or well depth sensors can provide an accurate picture of irrigation water use.

Harvest have various sensors and options available for monitoring a range of variable including pipe pressure, flow meters, well/bore depth and weir depth/flow.