Standard Ag/Hort Weather Station

This fully automated Campbell Scientific weather station has been designed to measure all of the parameters used for crop growth, including soil moisture and PET (Potential Evapotranspiration). In addition, for irrigators, it can be connected to your flow meter and/or pump power supply and will fit underneath a pivot irrigator to help you improve irrigation efficiency.

The station is powered by a research grade Campbell Scientific datalogger, with sensors selected for their accuracy and reliability in New Zealand conditions. It has specifically been designed for farmers who want ongoing, accurate and reliable climate data for their farm.

Measures:

- Wind speed & direction
- Temperature
- Humidity
- Rainfall
- Solar radiation
- Soil moisture, temperature & conductivity
- Calculation of evapotranspiration and Growing Degree Days (GDD)

Features include:

- Research grade Campbell Scientific electronic datalogger
- Data collection via cell phone telemetry
- Web display and smart phone App available
- Post mounted mast with all instrument mounts
- Rugged enclosure with integral solar panel and 12V SLA battery
- Published specifications available for all the sensors used

Options include:

- Output from a third party flow meter (pulse output)
- Single or 3-phase power monitoring (using current transducers)
- Leaf wetness
- Additional temperature sensor
- Higher grade rain gauge
- Alarm output (SMS or phone call)
- Wireless transmission to office base
- Field installation

^{*} LoggerLink Mobile App requires telemetry data plan









Specifications

Sensors

		Range	Accuracy
•	Temperature	-10 - +60° C	± 0.6 °
•	Humidity	0 – 98%	± 3%
•	Wind speed	1 – 96 m/s	< 0.1 m/s for the range 5 to 25 m/s
•	Wind direction	0 - 360°, deadband 4-8 °	potentiometer linearity within 1%
•	Solar radiation	0 – 2000W/m²	± 2%
•	Soil moisture	0 – 60% VMC	± 0.5%
•	Soil temperature	-10 - +50° C	± 0.2 °
•	Rainfall	0 – 140mm/hr	± 4%

Data Output

- Hourly (default, custom intervals possible)
- Mean temperature, humidity, wind speed, wind direction (unit vector), solar radiation, soil temperature, soil moisture, conductivity.
- Total rainfall, Potential Evapotranspiration, Growing Degree Day
- Data displayed on secure web page: www.envirodata.co.nz (annual fee applies)

Datalogger

- Campbell Scientific CR200X
- Data Storage 400,000 points

Power Supply

 Integral solar panel charging 12V SLA battery

Mounting

- Weatherproof plastic enclosure for measurement electronics
- Pole suitable for mounting on fencepost
- Wind and solar instruments mounted on cross arm



