

WEATHER STATIONS for AGRICULTURE / HORTICULTURE

The following specifications describe our standard agricultural weather station for determining background environmental conditions.

Features:

- Measures air temperature, relative humidity, wind speed, wind direction, solar radiation, soil moisture, soil temperature and rainfall
- High grade sensors selected for their accuracy and durability
- CR200 datalogger manufactured by Campbell Scientific, the world leaders in designing rugged, low power dataloggers for remote automated weather stations
- Data storage of 40,000 data points
- Naturally ventilated radiation shield for accurate temperature measurement
- Cross arm for wind instruments
- 2.5m mast
- Stainless steel enclosure to withstand extended field deployment
- Datalogger program to output standard data files.
- Sealed lead acid battery charged by a 10W Solar Panel (incl. fittings)
- PC200W support software (for direct cable connection)

Other options may include:

Alternative Sensors: Barometric Pressure, UV, PAR, Water Level, Water Quality

Telemetry: Landline phone, Cell phone (027 or 021), Spread Spectrum Radio (license-free), LAN

Software: PC400W or LoggerNet to support stations on telemetry or for scheduled data collection

Mounting: Use your own mounting system or one of our standard masts

We encourage you to contact one of our applications specialists to discuss your particular requirements.

Specifications		
	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% Volumetric moisture content	± 0.5%
Soil temperature	-10 - +50° C	± 0.2 °
Rainfall	0 – 140mm/hr	0.2 mm

Data Output		
modified to maximise storage)	Mean temperature, humidity, wind speed, wind direction (unit vector), solar radiation, soil temperature, soil moisture. Total rainfall.	
Options	Potential Evapotranspiration, Growing Degree Day	

Typical Configuration Wind Wind Speed Direction Sensor Sensor **GSM** Aerial Solar Radiation Sensor Solar Panel Rain Gauge Temperature & Humidity Sensor Telemetry & Datalogging Enclosure

Soil Moisture and Temperature Sensor in the ground.