



Envirodata Weather Stations P/L Capability Statement

Engineering & Design

Envirodata Weather Stations Pty Ltd has over 35 years of experience designing, manufacturing and supplying automatic weather stations including proprietary software. Envirodata operates from Warwick in Queensland, Australia. Envirodata's key staff collectively boasts over 80 years of experience in the weather monitoring industry.

The company was formed in 1983 by Peter Rodeck and remains in his ownership. The original business operation began with the commercialisation of an early model automated weather station developed by Australia's peak scientific research body – the CSIRO. Thirty five years later Envirodata's automatic weather stations are vastly more powerful and versatile. Typical solutions today incorporate Envirodata's integrated telemetry systems which allow customers to monitor and manage their weather station from anywhere in the world.

Envirodata staff include electronics engineers, software developers, communications technicians and contract Mechanical Engineers for the design and testing of all its products. 35 years of experience and long term relationships with key engineering suppliers (20+ years typical relationship) means Envirodata has the capability to design, update and improve all facets of weather monitoring systems into the future. The weather stations are designed to survive in the harshest environmental conditions keeping in mind three important design rules; accuracy, reliability and simplicity for users.



Weather Monitoring Products

Envirodata's principal weather monitoring product is its modular Weather Maestro system. These encompass Envirodata's integrated data logger, solar power supply and a range of sensors, mounting infrastructure & communications options. All systems are subject to stringent quality control procedures and undergo rigorous testing and calibration in our factory.

These systems were first released in 2009 and Envirodata has since delivered over 1,500 systems across Australia and around the world. Associated products include:

WeatherMaster 3000: a compact multi-parameter suite with integrated data logger and the most commonly used sensors.

WeatherWombat & WeatherMate: entry level compact modular systems containing a data logger and a limited number of sensors and communication options.

Logging Rain Gauge: a tipping bucket rain gauge and WeatherMate data logger: this is an all in one premium logging rain gauge available with or without remote telemetry.

Envirodata manufactures a range of core sensors including:

- Wind speed
- Wind direction
- Air temperature
- Relative humidity
- Solar radiation
- Rainfall
- Barometric pressure

In addition a wide range of other manufacturers' sensors can be interfaced to our systems, including such sensors as precipitation, dust, visibility, lightning, cloud height, water depth and soil moisture.

Envirodata's Weather monitoring solutions are manufactured to commercial and scientific research standards; however they are flexible and configurable to suit a wide variety of industries and applications.

Equipment and software is designed to be intuitive and easy to use for non-technical users, as well as satisfying the demands of highly technical users.



Australian Standards and World Meteorological Organisation (WMO) Standards

Envirodata's weather monitoring systems are capable of meeting both Australian Standards and WMO Guidelines, providing customers with confidence in the weather records from their site(s).

An integral part of meeting these standards includes the correct mounting heights and exposure ratios for each instrument. Envirodata's staff are trained in siting of these systems to the appropriate standards. All mounting hardware has been designed with Australian and WMO standards in mind.

This includes 10 metre masts to meet the requirement to mount the wind sensors at 10m height above ground. The 10m masts are rated to withstand wind gusts of up to 57m/s (IS37) or 88m/s (IS88) meaning recording continuously in even the most adverse weather events is now possible.



The 10m mast assemblies from ground level, and winches into position, with no need for a crane or ultra-deep footings. It is able to be transported easily to site without the need for special lifting equipment. This allows for a single technician installation in truly remote sites.

Weather Data Delivery: WeatherMation LIVE Service

Envirodata's WeatherMation LIVE service automates the secure collection and distribution of customers' weather data from all of their Envirodata weather stations. The WeatherMation web portal provides simple and customisable access to live and historical weather data. The portal can be securely accessed from any internet browser on a laptop, desktop or mobile device.

Advanced features include SMS and email alerts to notify the selected users of the chosen weather conditions. Notifications can likewise be sent on a regular schedule with pre-selected data sets.

On-screen reports and dashboards allow customer's users to access their selected data in an informative and intuitive way. With data updated at rates of up to every minute, the customer's ability to respond to their weather is truly immediate.

Automated regular transfer of weather data is available via FTP (or SFTP) to allow for simple integration into a 3rd party database.

Field Installation & Service

Envirodata's Service Department currently has 5 full time staff and 4 fully equipped service vehicles that travel to customer sites across Australia. For sites more than 1,800km from Envirodata's South East QLD head office, commercial air transport is typically utilised.

Customers can take advantage of professional installation which ensures their systems are installed in a timely fashion, to a fixed price, with upgraded warranty and in accordance with the relevant standards. Beyond the initial installation, on-site calibration and preventative maintenance services ensure the systems keep working as required with minimal effort from the customer.

Service Level Agreements and emergency call-out services are also available to Envirodata's customers. Along with remote phone support, same day dispatch on most spare parts and the option of loan equipment, Envirodata's customers can be assured their system critical weather monitoring will have minimal downtime in the unlikely event of an issue arising.

Envirodata's aim is to offer their customers a 'hands-off' approach to weather monitoring. This places them as a service leader and unique in the industry for undertaking this level of service Australia wide.

Currently the Service department delivers, installs and commissions over 50 weather monitoring systems per year, plus services more than 300 customer weather stations on their sites each year. With a dedicated Service Manager in-house, Envirodata can easily expand this capability to meet increased demand.

Factory Repair and Recalibration

Envirodata provides an in-house technical service department, which ensures all their products can be upgraded, serviced, recalibrated or repaired. In addition, Envirodata offers free telephone and email support for the life of the equipment, along with professional advice.



Ethics and Philosophy

Envirodata has been operating for over three decades and has built its reputation on providing a high level of service to all customers, for the life of their equipment.

The Future

Many years of experience in this industry have confirmed that effective weather data delivery combined with complete customer support services are crucial for the commercial weather station user, long after the equipment has been selected and installed.

Envirodata therefore re-affirms its focus on incorporating customer feedback, our staff experience, market needs and new technologies to enhance their customer's data collection and distribution experience by delivering desirable, reliable and robust hardware and software solutions for their customers.