



## WeatherMaster 1600

(WM16)

### Features

- Measures:
  - WIND SPEED
  - WIND DIRECTION
  - AIR TEMPERATURE
  - RELATIVE HUMIDITY
- Provision for fifth sensor (optional)
- Provides current readings plus 15 minute, hourly and daily summary
- Solar powered, durable stainless steel and powder coated aluminium construction
- Includes Windows based graphing, database and reporting software
- Readily upgradeable to WeatherMaster 2000.
- Stores 100 days of daily data, 65 days of hourly data and 4 weeks of 15 minute data.

### Applications

- Dust, Spray, Odour and Pollutant movement monitoring (with AirData – AD40, and Sigma Theta)
- Industrial and Agricultural Monitoring
- Scientific Research
- Micro-climate Meteorology
- Environmental Monitoring

### Communication and Remote Monitoring Options

- Cable connection to PC or Laptop
- Hand-held Display/Download Device (LC21- Data Courier)
- Standard telephone link (phone line & modem)
- Next G Data Modem Link (to PC)
- Radio Link

### The WeatherMaster 1600 Package

The WeatherMaster 1600 is a compact, robust, automatic weather station. It consists of four inbuilt electronic weather sensors, Windows software, data logger, solar panel, battery and powder-coated stand. Each sensor continuously sends information to the data logger, which processes and stores the data in its memory. The data is then available for collection and analysis using a personal computer. Additional hardware and software options are also available.

### Optional Fifth Sensor

To meet the diverse requirements of different users, a fifth optional sensor may be connected up to 100 metres away to allow the WeatherMaster 1600 to be customised to suit your application. With the addition of a fifth sensor, data memory of 15 minute data is slightly reduced.



### Factory calibration

All sensors are factory calibrated so that each system is ready for use immediately, and can be used without any need for adjustment for an extended period.

### The single unit makes it simple

Thanks to its light-weight innovative design, the Envirodata WeatherMaster 1600 is easy to carry to site, easy to set up, and easy to operate immediately. The system is solar powered, and fully self-contained, so that it can be sited almost anywhere. There are no electrical connections to be made, no mechanical assembly - just mount the unit on a post or portable stand and switch it on.

### Weather Records (Standard schedule)

#### Daily Summary:

WIND SPEED – Max, Average  
WIND DIRECTION – Average  
AIR TEMPERATURE – Min, Max, Average  
RELATIVE HUMIDITY – Min, Max, Average

#### Hourly Summary:

WIND SPEED – Average  
WIND DIRECTION – Average  
AIR TEMPERATURE – Average  
RELATIVE HUMIDITY – Average

#### 15 Minute Summary:

WIND SPEED – Average  
WIND DIRECTION – Average  
AIR TEMPERATURE – Average  
RELATIVE HUMIDITY - Average

### Envirodata Environmental Monitoring & Management

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## WeatherMaster 1600 Specifications

### Sensors

**Air Temperature:** -15.0°C to + 60.0°C

Accuracy +/- 0.2°C at 25°C

Resolution 0.1 °C

**Relative Humidity:** Electronic capacitance type

Accuracy +/- 3% for 0-90%;

+/- 4% for 90-100%

Range 0-100%. Resolution 0.1%

**Wind Speed:**

3 Cup 66mm Anemometer

Rating:- 70m/sec

Resolution 0.1 kph

Starting threshold 1 kph

**Wind Direction:**

Hall Effect Sensing

Resolution 2 degrees

Accuracy +/- 2 degrees

**Active range 0 – 359 degrees**

### Extra Sensors (Optional – one only):

Barometric pressure, leaf wetness, soil temperature, grass temperature, or any of the above as an additional sensor (excluding Rainfall). Interfaces for voltage, current, resistance available on request.

### Data Recorder

#### Memory

Data stored into 3 independent memory areas. 104K battery backed RAM - stores a total of 29,000 data Readings ( plus date and time stamps).

#### System Indicator

- 1 Second flash - Communicating
- 2 Second flash - Normal
- 4 Second flash - Sensor out of range, program fault or flat battery

#### Battery

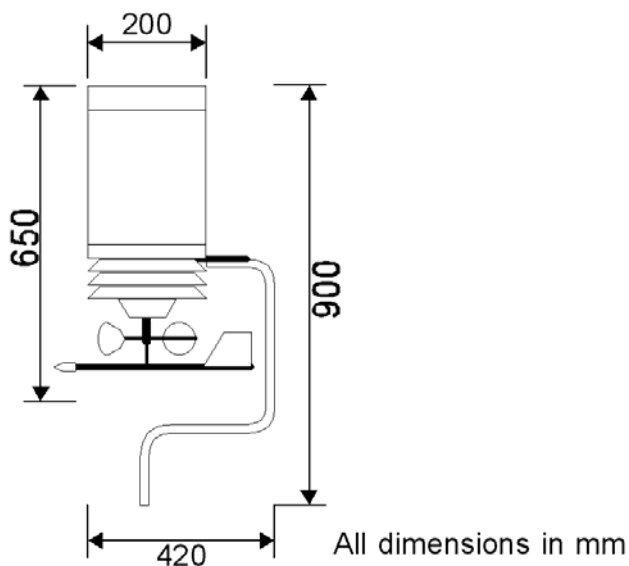
6 volt 3.0AH internal sealed rechargeable gel cell - capacity for 6 weeks' operation without sunlight.

#### Power Consumption

5 mA in operating mode. 50mA while communicating. 1mA shutdown mode.

#### Solar Charger

1.1 watt panel - maintains battery with one hours' bright sunshine per day.



### Weight:

Complete system is 7 kg (excluding mounting pole)

### Lightning Protection

Software failure as a result of nearby lightning strike initiates an automatic circuit 'watch dog' to restart the logger within a minute, ensuring data storage is uninterrupted.

### Programming

Delivered with standard schedule loaded so that it operates immediately. At any time you can select alternative schedules (supplied on CD) or create your own.

### Software

Windows EasiAccess software included in the WM16 package. EasiAccess (EA40) contains weather station management functions, database and full reporting and graphing options. EasiAccess Software operates on 486 and above operating Windows 98, 2000 & XP. Pentium preferred.

### RS232 Connection

6 pin (serial RS232C standard). DTR, DSR, TX, RX, ground & power. 300 to 9600 Baud

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