

Compact all-in-one weather station

The WS-GP1 is an affordable weather station supplied as a ready-to-use package.

The carefully matched, high grade sensors make the WS-GP1 a good choice for research, agricultural and environmental applications.

Easy to use:

- **Highly portable**
- **Pre-wired for rapid set-up**
- **GPRS modem download options**

Complete package:

- **Dependable, accurate sensors**
- **2m tripod mast**
- **Pre-installed weather logging program**

The WS-GP1 includes sensors to measure rain, solar radiation, wind speed, wind direction, relative humidity and air temperature.

Simple and convenient

A complete, battery-powered, compact solution for recording weather data. The WS-GP1 can be set up in minutes and requires minimal maintenance. The internal battery provides 6 month's operation (typical).

Accurate

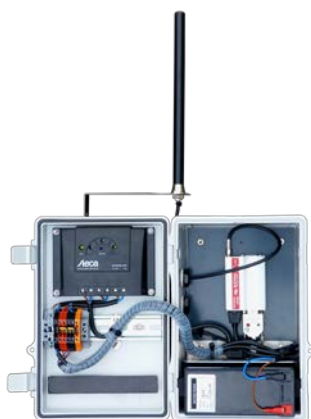
The sensors are carefully matched for reliability and accuracy. Being based on the powerful GP1 Data Logger, the system provides high quality weather data at moderate cost.

Easy data collection

Data can be collected with a notebook PC, or by using the GPRS modem option.

Rugged

Despite their low cost, the sensors are dependable and suitable for use in demanding environments. The galvanised steel tripod and white painted stainless steel cross-arm ensure excellent physical strength – and an optional steel guy wire kit is available for additional stability.



*Optional solar powered
GPRS modem box*



APPLICATIONS

Agro-meteorology, Hydrology, Crop Trials, Environmental Science, Agriculture, Waste Management, Climatology, Agronomy, Environmental Impact Studies, Meteorology

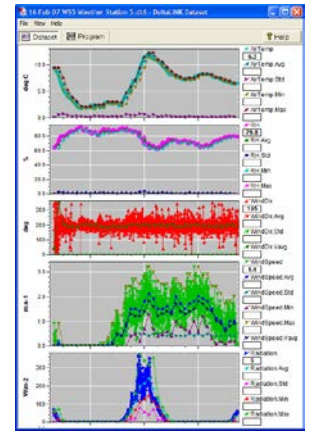


Data recording & viewing

The purpose of the WS-GP1 is to record accurate weather data in a form that's easy to access.

Logging and data presentation options include:

- wind rose
- gusts
- average, including direction and vector average



WS-GP1 Weather Station Specifications

| | Specification | Range / Note |
|--|-------------------------------|--|
| Wind speed D-034B-CA (combined wind sensor) | | |
| Range | 0 to 75m.s ⁻¹ | |
| Accuracy | ± 0.1m.s ⁻¹ | Up to 10 m.s ⁻¹ |
| | ± 1.1% of reading | Over 10 m.s ⁻¹ |
| Starting threshold | 0.4m.s ⁻¹ | -30° to +70°C if icing minimal |
| Wind direction D-034B-CA (combined wind sensor) | | |
| Accuracy | ± 4° | Mechanical: 0 to 360° Electrical: 0 to 356° |
| Starting threshold | 0.4m.s ⁻¹ | -30° to +70°C if icing minimal |
| Rainfall RG2+WS-CA | | |
| Sensitivity | 0.2mm/tip | 160 mm funnel diameter |
| Humidity RHT3nl-CA (combined air temp sensor) | | |
| Accuracy | ± 2% RH | 5 to 95% RH |
| | ± 2.5% RH | <5%, >95% RH |
| Air temperature RHT3nl-CA (combined RH sensor) | | |
| Accuracy | ± 0.3°C | -20 to 70°C |
| Solar radiation D-PYRPA-CA | | |
| Accuracy | ± 5% | 0 to 1.1 kW.m ⁻² 300 to 1100 nm |
| | Cosine response | ± 1% at 45° ± 4% at 75° |
| Data recording and power | | |
| Logging frequency | 1 s to 24 hr | Logging status indicated by flashing LED |
| Data collection | To PC or Pocket PC | DeltaLINK software |
| Battery life: reading every 5 minutes | 9V alkaline | 190 days typical |
| Physical | | |
| Environmental | IP65 sealing | |
| Temperature | -20 to +60°C | if icing minimal |
| Cross-arm | White-painted stainless steel | Fits horiz. or vertical pole (42-52 mm dia.) |
| Weight | 14.3 Kg | Complete with 2m tripod and ground stakes |

Practical design

The WS-GP1 is supplied in two suitcase-style carry cases that can be used to store or transport the system. The cases are easy to stow in a vehicle and are light enough for one person to carry on site.

The sensors and logger are ready assembled and pre-wired on the cross-arm, making it an easy task to assemble the system, even in difficult environments. The well-illustrated Quick Start Guide leads the user through the process of installation, set-up and data collection.

Other mast options are available e.g. a simple 2m pole for mounting in concrete. Alternatively, the cross-arm can be ordered separately for fitting onto the customer's own mast (42-52 mm diameter).

GP1 Data Logger

At the heart of the WS-GP1 Weather Station is the powerful GP1 Data Logger.

- >600,000 readings
- Waterproof - IP67
- Accurate and reliable

DeltaLINK software is supplied as standard with the GP1. This easy to use software helps you to check sensor operation, set up recording intervals, and view and download logged data. A Dataset Import Wizard makes it easy to import data into Excel spreadsheets.

Data can be collected remotely using an optional battery powered **GPRS Modem** communication system. A solar recharging option can extend the battery life of modem systems. (Please note that modem options do not fit inside WS-GP1 carry cases).

As a stand-alone logger, the GP1 can handle a wide range of data logging and irrigation monitoring applications. Up to 10 GP1s can be connected in a GP1 cable network.



A separate GP1 data sheet is available on request.



Delta-T Devices Ltd

130 Low Road, Burwell, Cambridge, CB25 0EJ, UK

Tel: +44 1638 742922 sales@delta-t.co.uk www.delta-t.co.uk

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