



# Weather Station type WS-GP1

## Compact all-in-one weather station

**NEW**

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
- PDA and GSM 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 for alkaline; much longer with optional internal lithium battery).

### 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.

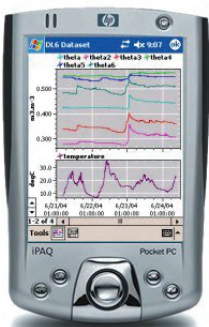
### Easy data collection

Data can be collected with a notebook PC, or by using the GSM modem option. Alternatively, Pocket DeltaLINK Software (optional) can be used to collect and view the data, or to reconfigure the logging set-up in the field.

### 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.



### APPLICATIONS

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



### WS-GP1 Weather Station Specifications

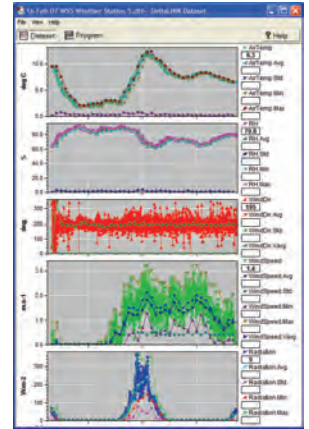
	<b>Specification</b>	<b>Range / Note</b>
<b>Wind speed</b> D-034B-CA (combined wind sensor)		
Range	0 to 75m.s <sup>-1</sup>	
Accuracy	± 0.1m.s <sup>-1</sup>	Up to 10 m.s <sup>-1</sup>
	± 1.1% of reading	Over 10 m.s <sup>-1</sup>
Starting threshold	0.4m.s <sup>-1</sup>	
<b>Wind direction</b> D-034B-CA (combined wind sensor)		
Accuracy	± 4°	Mechanical: 0 to 360° Electrical: 0 to 356°
Starting threshold	0.4m.s <sup>-1</sup>	
<b>Rainfall</b> RG2+WS-CA		
Sensitivity	0.2mm/tip	160 mm funnel diameter
<b>Humidity</b> RHT3nl-CA (combined air temp sensor)		
Accuracy	± 2% RH	5 to 95% RH
	± 2.5% RH	<5%, >95% RH
<b>Air temperature</b> RHT3nl-CA (combined RH sensor)		
Accuracy	± 0.3°C	-30 to 70°C
<b>Solar radiation</b> D-PYRPA-CA		
Accuracy	± 5%	0 to 1.1 kW.m <sup>-2</sup> 300 to 1100 nm
Cosine response	± 1% at 45° ± 4% at 75°	At zenith angle
<b>Data recording and power</b>		
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
	9V lithium (option)	550 days typical
<b>Physical</b>		
Environmental	IP65 sealing	
Temperature	-20 to +60°C	Beyond -10 to 60°C, use lithium batteries
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

### 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**



### 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 **GSM Modem** communication system. A solar recharging option can extend the battery life of modem systems. The GP1 can also be used with a **PDA** (requires optional Pocket DeltaLINK software).

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 data sheet is available on request.



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