

Brannan Product Data Sheet

PDS0233.20.REV5

Humidity, Temperature and Dew Point USB Data Logger with LCD



This standalone data logger measures and stores up to 16,379 relative humidity and 16,379 temperature readings over 0 to 100%RH and -35 to +80°C (-31 to +176°F) measurement ranges. The user can easily set up the logger and view downloaded data by plugging the data logger into a PC's USB port and running the purpose designed software under Windows 10, 8, 7, 2000, XP and Vista (32-bit). Relative humidity, temperature and dew point (the temperature at which water vapour present in the air begins to condense) data can then be graphed, printed and exported to other applications. The high contrast LCD can show a variety of humidity and temperature information. At the touch of a button, the user can cycle between the current, maximum and minimum stored temperature and humidity. The data logger is supplied fitted with a long-life lithium battery which can typically allow logging for 1 year. This data logger can also be used in conjunction with our Handheld Programmer and Data Collector (available separately - 38/760/0) which allows the user to configure their unit, download data and view logging results on-the-spot rather than removing the logger from the environment being measured to take to the PC.

Product Features

- Humidity measuring range: 0 to 100% RH
- Temperature measuring range: -35 to +80°C (-31 to +176°F)
- Dew point indication via Windows control software
- USB interface for set-up and data download
- User-programmable alarm thresholds for % Relative Humidity and Temperature
- Status indication via red and green LEDs
- High contrast LCD, with 2½ digit temperature and humidity display function
- Immediate, delayed and push-to-start logging
- Supplied with replaceable internal lithium battery and Windows control software
- Environmental protection to IP67



Control Software

The EasyLog USB control software is supplied free of charge with each data logger. Easy to install and use, the control software runs under Windows 10, 8, 7, 2000, XP and Vista. The software is used to set-up the data logger as well as download, graph and export data to Excel.

		Minimum	Typical	Maximum
Relative Humidity	Measurement Range	0%RH	-	100%RH
	Repeatability	-	+/-0.1%RH	-
	Accuracy (overall error)	-	+/-2%RH*	+/-4%RH
	Internal Resolution	-	0.5%RH	-
	Long Term Stability	-	0.5%RH/year	-
Temperature	Measurement Range	-35°C/+31°F	-	+80°C/+176°F
	Repeatability	-	+/-0.1°C/0.2°F	-
	Accuracy (overall error)	-	+/-0.3°C/0.6°F	+/-1.5°C/3°F
	Internal Resolution	-	0.5°C/1°F	-
Dew Point	Accuracy (overall error)	-	+/-1.1°C/2°F**	-
Logging Rate		every 10 seconds	-	every 12 hours
Operating Temperature Range		-35°C/-31°F	-	+80°C/+176°F
½ AA 3.6V Lithium Battery Life		1pc per year (fitted)***		

* This specifies the overall error in logged readings, for relative humidity measurements between 10 and 90%RH.

** This specifies the overall error in the calculated dew point, for relative humidity measurements between 40 and 100%RH at 25°C.

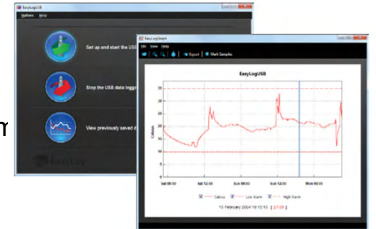
*** Depending on sample rate and ambient temperature.

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The software allows the following parameters to be configured:

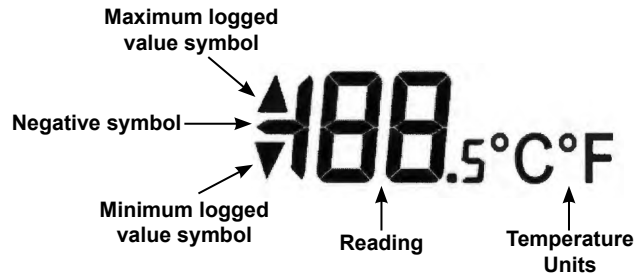
- Logger name
- °C or °F
- Logging Rate (10s, 1m, 5m, 30m, 1hr, 6hr, 12hr)
- High and low alarm levels
- Immediate, delayed and push-to-start logging
- Display off, on for 30 seconds after button press, or permanently on.
- Data rollover (allows unlimited logging periods by overwriting the oldest data when the memory is full)



See Brannan website to download latest version of the control software.

Display and Status Function

The Data Logger features a high contrast LCD and two LEDs. The LCD shows logged temperature values and can also show information regarding the logging status.



LCD Indication

The LCD shows three different recorded readings, which can be cycled through using the built-in push button. The most recent logged temperature, maximum logged temperature and minimum logged temperature can be displayed. In addition, logging and alarm status is shown using two high intensity LEDs.

LED Flashing Modes

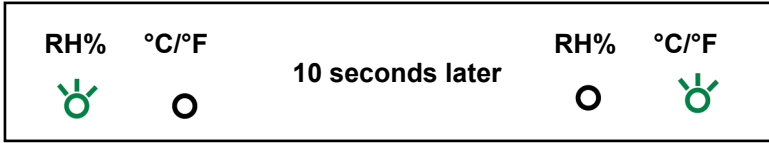
This data logger features two bi-colour LEDs; one LED represents temperature measurement, the other represents RH. Each is clearly marked on the logger. To save power, the status indication alternates between the two channels every 10 seconds, ie the temperature channel flashes and 10 seconds later the relative humidity channel flashes, repeating for the duration of logging activity.

Display Logger	Status	Explanation
d5	Delayed Start	This is shown when the logger is set to start at a specific date and time.*
P5	Push to Start	This is shown when the logger is setup for "Push to start" logging.
109	Logging	This is shown when the logger is running in "LCD off" mode, and the button is pressed. The display clears again after three seconds.
---	Stopped	If the logger has not been set to log and the button is pressed, three dashes are displayed for three seconds.

* If the logger is set to "LCD off" or "LCD on for 30 seconds" mode, then this will only be shown after the button is pressed. Otherwise the display will remain blank.

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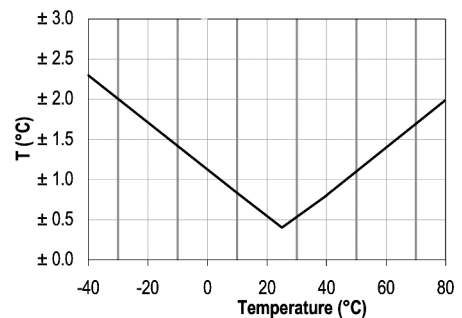
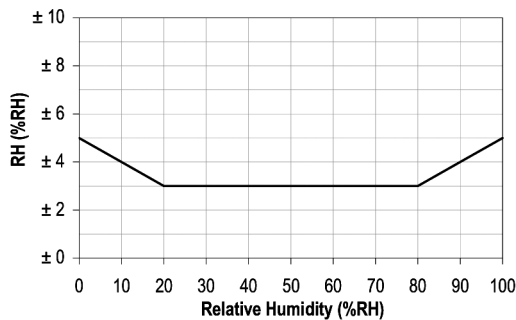


		Green double flash The data logger is not currently logging, but is primed to start at a later date and time (delayed start).
		Green single flash The data logger is currently logging. No alarm on this channel.
		Red single flash The data logger is currently logging. Low alarm on this channel.
		Red double flash The data logger is currently logging. High alarm on this channel.
		Green triple flash The data logger is full and has stopped logging. No alarm on this channel.
		Red triple flash The data logger is full and has stopped logging. Alarm (high, low or both).
		No LED flash The data logger has stopped, the battery is empty or there is no battery.
		Dual red flash (every 60 seconds) The data logger battery is running low as its voltage has dropped below 2.9V.

Measurement Accuracy

Battery Replacement

We recommend that you replace the battery every 12 months, or prior to logging critical data. This data logger does not lose its stored readings when the battery is discharged or when the battery is replaced, however, the data logging process will be stopped and cannot be re-started until the battery has been replaced and the logged data has been downloaded to a PC.



Only use 3.6V ½AA lithium battery. Check with your supplier that the battery you are ordering is 'press fit' and is not fitted with solder tags. Before replacing battery, remove the data logger from your PC.

Note: Leaving the data logger plugged into the USB port for longer than necessary will cause some of the battery capacity to be lost.

WARNING

Handle lithium batteries carefully, observe warnings on battery casing. Dispose of in accordance with local regulations.

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Weights & Dimensions:

Product Weight:

Packaged - 99g

Unpackaged - 51g (including battery)

Product Dimensions:

Packaged - 100mm x 140mm x 40mm

Unpackaged - 25.3mm x 119.5mm

Packaging Component Weights:

Box & Instructions (paper) - 36g

Insert Tray (plastic) - 15g

CE:

Approved

ROHS/WEEE:

Compliant

Hazard Information (SDS):

See www.brannan.co.uk for information

Description	Barcode	Product No
USB Data Logger	5 011405 387578	38/757/0