EL-GFX-D2

Dual Channel Temperature, Humidity and Dew Point Data Logger with External Probe



FEATURES

- Dual channel Temp, RH and Dew Point data logger with external probe (supplied with x1 probe)
- -30 to +80°C (-22 to +176°F) and 0 to 100%RH measurement ranges
- Stores over 250,000 readings per channel for temperature and humidity
- Logging rates between 10 seconds and 1 hour
- On screen menu and graphing to start, stop, review and restart the logger in the field
- Triggered logging mode to start recording data once a user defined level is met
- User-programmable audible alarm thresholds with highly visible confidence/alarm LEDs
- Supplied with EasyLog software for Windows

This standalone data logger measures and stores over 250,000 temperature and humidity readings over a -30 to +80°C (-22 to +176°F) and 0 to 100%RH range at a resolution of 0.1°C (0.2°F) and 0.1%RH.

The user can easily set up the logger and view downloaded data by plugging the data logger into a PC's USB port and using the EasyLog USB software, free to download from **www.lascarelectronics.com/software/easylog-usb**. Data can then be graphed, printed and exported to other applications.

The data logger features a high contrast dot-matrix LCD and three buttons to navigate through an on-screen menu. This menu provides the user with access to real-time trend analysis, data summaries and the ability to start, stop and restart the data logger without the need to connect the data logger to the host-PC. Users can reset the maximum / minimum reading using the on-screen menu; this introduces an 'event marker' into the data which can later be viewed in the graphing software ('Mark Events' option) and the data file after download.

The data logger is supplied complete with two lithium metal batteries, which can typically allow logging for up to 1 year. It can also be powered from USB.

SPECIFICATIONS

Temperature	**Measurement Range**	-30°C to 80°C (-22°F to 176°F)
	Internal Resolution	0.1°C (0.2°F)
	Accuracy (logger error)	± 0.3°C (0.6°F) typical
Relative Humidity	**Measurement Range**	0 to 100%RH
	Internal Resolution	0.1%RH
	Accuracy (logger error)	± 2.05%RH typical (20 to 80%RH)
	Long Time Stability	0.5%RH / year
Dew Point	**Accuracy (overall error)**	± 1.1°C typical (±2.0°F)
Logging Rate		Between 10 seconds and 1 hour
Battery Life*		1 year 2 x ½ AA 3.6V
Dimensions of logger		101 x 48.5 x 30.5mm (3.98 x 1.91 x 1.20")
Probe Dimensions		37 x 12 x 8mm (1.5 x 0.5 x 0.3")
Cable Length		2000mm (79")

* At 25°C and 10 minute logging rate with no alarm LEDs or sounder and minimal LCD use.

EL-GFX-SP-2+ (Available at Additional Charge)

Temperature Resolution	0.01°C (0.02°F)
Temperature Accuracy	±0.2°C (±0.4°F) typical
Humidity Accuracy	±1.8%RH

ACCESSORIES

EL-GFX-SP-2	Additional Probe to accommodate second channel
EL-GFX-SP-2+	Higher Accuracy Probe

INCLUDED IN THE BOX

EL-GFX-D2	Data Logger
EL-GFX-SP-2	1 X T/H Smart Probe
x2 BAT 3V6 1/2AA	Batteries
CABLE USB A-MICRO B	Micro USB cable
EL-GFX WALL BRACKET	Magnetic mounting bracket

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EASYLOG SOFTWARE

Lascar's EasyLog USB control software is available to download from www.lascarelectronics.com/software. Easy to install and use, the control software runs under Windows™ 7/8/10 (32 & 64bit). The software is used to set-up the data logger as well as download, graph and export data to Excel. Each stored logging session is saved as a separate file.

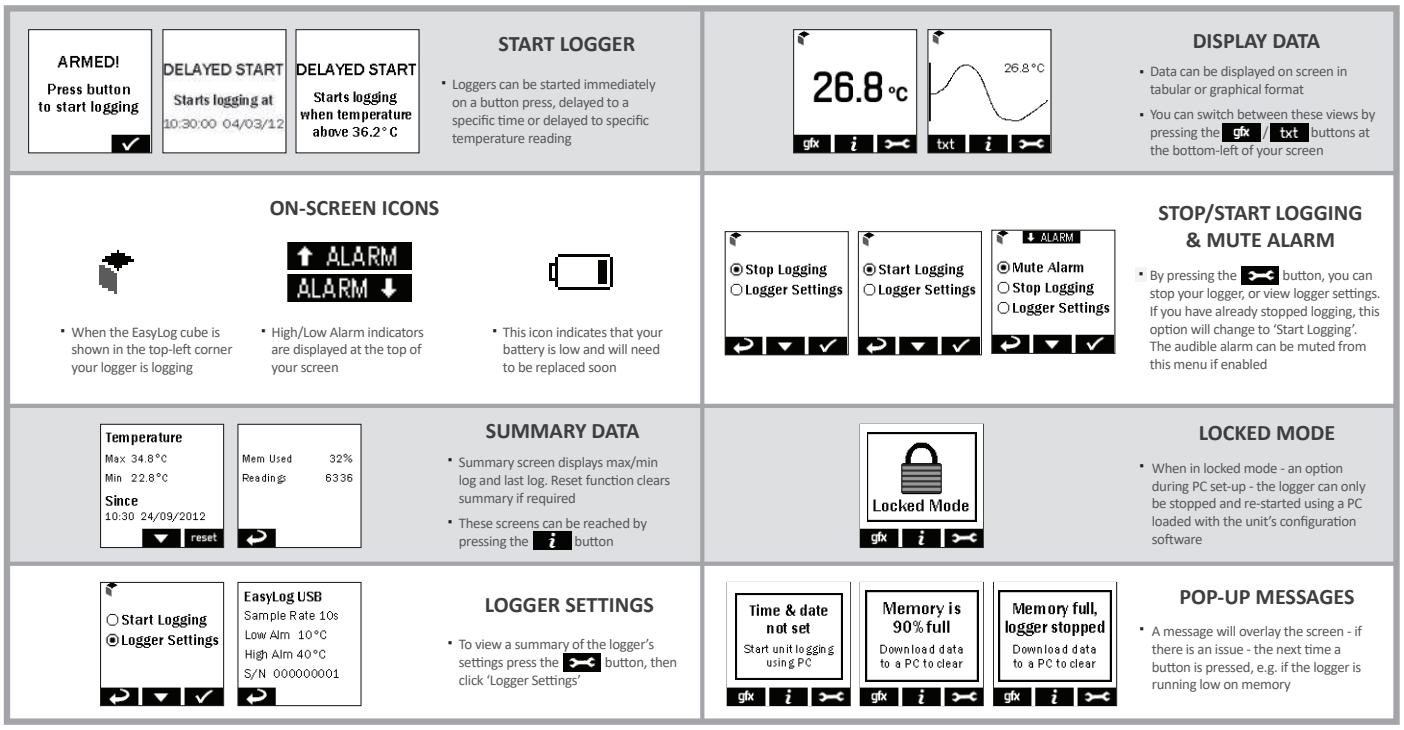


The software allows the following parameters to be configured:

- Logger name
- Measurement parameter (°C or °F)
- Logging rate (customisable between 10 seconds and 1 hour)
- High and low temperature alarms on each channel
- Immediate, delayed, triggered and push-to-start logging
- Disable or enable LEDs and sounder with delayed activation
- Display off, on for 30 seconds after button press, or permanently on

Download the latest version of the software free of charge from www.lascarelectronics.com/software

MENU BUTTON FUNCTIONS AND LCD SCREEN INDICATION



Please note that screens may vary slightly depending on model.

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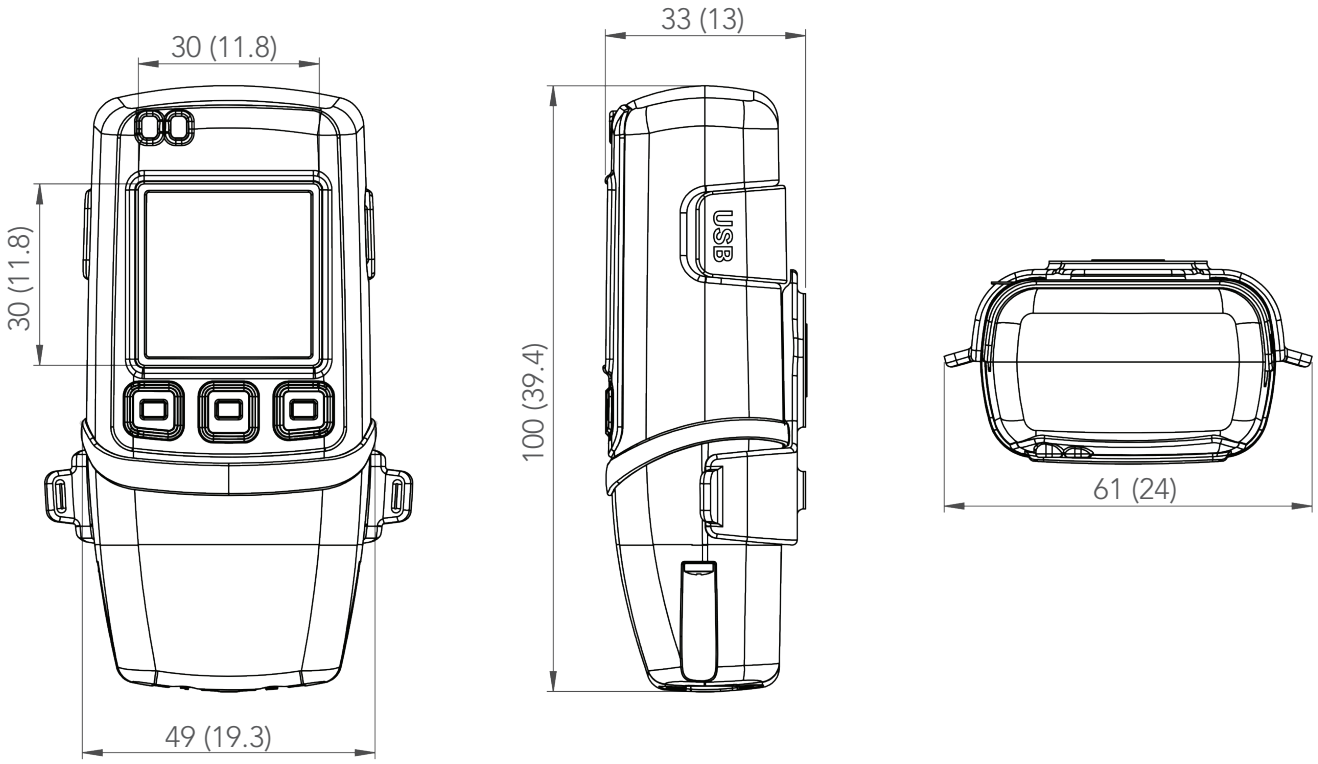
DIMENSIONS

All dimensions in mm (inches)



BATTERY INFORMATION

We recommend that you replace the batteries every 4 months, or prior to logging critical data.

Replacement

The EL-GFX-D2 does not lose its stored readings when the batteries are discharged or when the batteries are replaced; however, the data logging process will be stopped. If the batteries are changed within a 2 minute window the EL-GFX-D2 will retain its settings (internal clock and logging mode). This will allow logging to be restarted without additional connection to a PC via USB.

Only use 2 x 3.6V ½AA lithium batteries. Do not mix battery types and do not mix new and old batteries. Before replacing the batteries, unplug the EL-GFX-D2 from the PC.

Passivation

If left unused for extended periods of time, the Lithium batteries used in the EasyLog range of data loggers naturally form a non-conductive internal layer, preventing them from self-discharge and effectively increasing their shelf life. When first installed in the data logger, this may cause a momentary drop in the battery voltage (the Transient Minimum Voltage) as the internal layer is broken down, resulting in the data logger resetting. Inserting the batteries in the data logger and leaving it connected to a PC for about 30 seconds will remove this layer. After this, remove and re-install the batteries to reset the data logger. Overall battery life will not be affected.

WARNING

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

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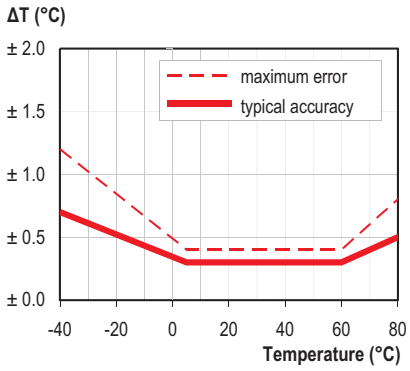
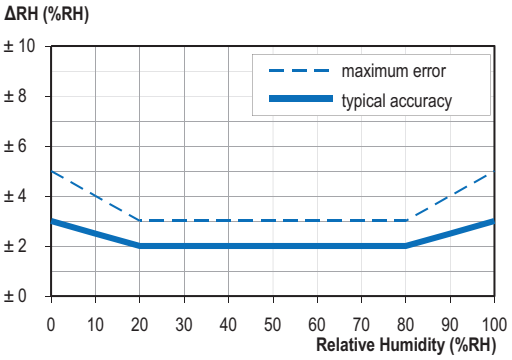
SENSOR ACCURACY & INFORMATION

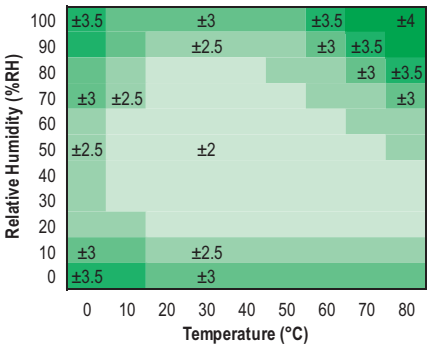
TH probe = Sensirion, SHT21 accuracy graph (EL-GFX-SP-2)



Typical and maximal tolerance for temperature sensor in °C.

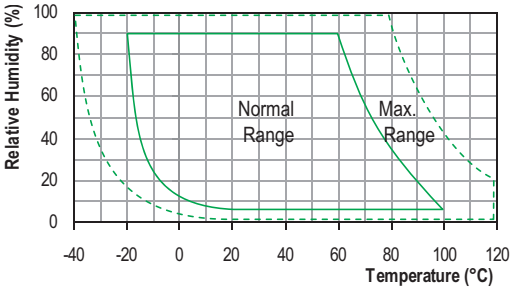


Typical and maximal tolerance at 25°C for relative humidity.



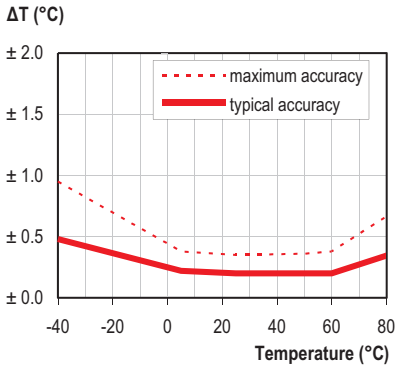
Typical accuracy of relative humidity measurements given in %RH for temperatures 0 to 80°C.

Operating conditions

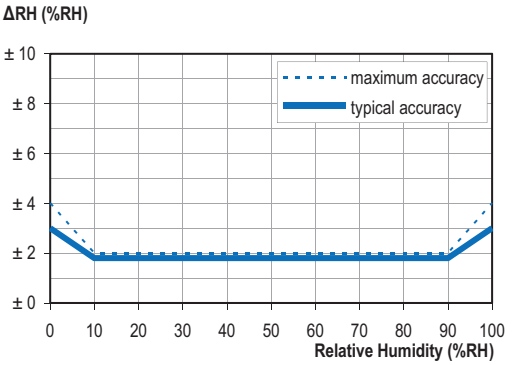


Long term exposure to humidity levels outside of the 'normal' range may temporarily offset RH measurements (±3%RH after 60 hours). Once returned to less extreme conditions the device will slowly return towards calibration state.

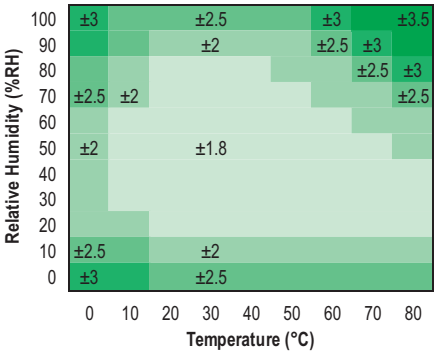
TH+ probe = Sensirion, SHT25 accuracy graph (EL-GFX-SP-2+)



Typical and maximal tolerance for temperature sensor in °C.



Typical and maximal tolerance at 25°C for relative humidity.



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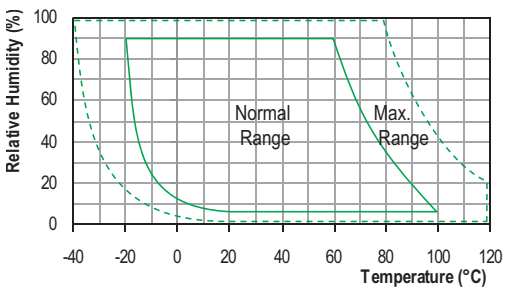

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