Model EL-BT-2
Bluetooth-enabled Temperature and Humidity Data Logger

✓ Hands-free, Bluetooth-enabled data logger measures ambient temperature and humidity

✓ Built-in temperature and humidity sensors

✓ Built-in high contrast display

✓ -20 to +60°C (-4 to +140°F) temperature and 0-100% humidity measurement range

✓ IP55 construction (dust- and water-tight)

✓ Settable alarm thresholds for both temperature and humidity

✓ Built-in rechargeable battery provides up to 6 months of service on a single charge

✓ Deep 500,000-sample memory for long, unattended recordings

✓ Automatically time and date stamps acquired data

✓ Free app for Android™ smart phones and tablets supports logger setup, data download, and display

DATAQ INSTRUMENTS

Model EL-BT-2 Bluetooth-enabled temperature and humidity data logger fills the convenience gap between stand-alone USB and WiFi data loggers. It maintains the simplicity of the manual USB approach while providing many of the automated benefits of WiFi without the IT network deployment hassles. The Bluetooth interface provides a handy approach to instantly configure and retrieve data from the logger using a smart device while in the logger's proximity (up to around 30 feet.) A free Android™ app installed on a compatible smart device provides all the software you need to detect, configure, and archive data from one or more EL-BT-2 instruments.

- **Device detection (one or more)**
- **Current temperature, humidity and dew point values**
- **Logger status retrieval**
  - Battery life
  - Free memory
  - Current configuration
- **Start time**
  - Immediate
  - Upon button press
  - At a specific future date and time
- **Device configuration**
  - Logger name
  - Sampling interval
  - Temperature scale (°F or °C)
  - Temperature and RH alarms (high/low/off)
  - Bluetooth and display settings (always on, or power save)

- **Download and archive recorded data**
- **Display and analyze recorded data**
  - Plot Temp, RH and dew point value versus time
  - List alarm trip points
  - Display min/max values for all measured variables
- **Share recorded data via ...**
  - Email
  - Google Drive
  - Android Beam
  - Any other method supported by your smart device
  - Share with PC-based EasyLog Graph for Windows

Model EL-BT-2 also has a built-in display and a front-panel control button that gives you a handle on operation and performance without a Bluetooth device. Pressing the control button activates the display. Successive depressions cycle between real time and minimum and maximum recorded temperature and RH values. Bluetooth connection and battery charge status are also shown. Finally, a red and green LED shows alarm and recording states at a glance. The EL-BT-2's internal battery delivers up to six months of operation on a single charge, and can be recharged.

Total Record Times

Sampling Interval	Record Time
1 sample every 10 seconds	> 57 days
1 sample every 15 seconds	> 85 days
1 sample every 20 seconds	> 113 days
1 sample every 30 seconds	>169 days
1 sample every 1 minutes	> 1.2 years
1 sample every 2 minutes	> 2 years
1 sample every 5 minutes	> 2 years
1 sample every 10 minutes	> 2 years
1 sample every 15 minutes	> 2 years
1 sample every 20 minutes	> 2 years
1 sample every 30 minutes	> 2 years
1 sample every 1 hour	> 2 years

The built-in display of the EL-BT-2 is a high-contrast device that's a pleasure to use. A front-panel pushbutton controls it, cycling through current and historical minimum and maximum values since the scan was initiated. The display also provides two LEDs, one red and another green. These flash at a fixed interval to provide information related to the loggers current status.

LED Status

🟢 🔴	**Green & Red, single flash (together)** Data logger is in push-to-start mode
🟢	**Green, single flash** Data logger is currently logging. No alarms detected.
🔴	**Red, single flash** Data logger is currently logging. Low alarm has been triggered.
🔴 🔴	**Red, double flash** Data logger is currently logging. High alarm has been triggered.
⚪	**No LEDs flash** Data logger is stopped or in delayed start mode

EasyLog Bluetooth Mobile App for Android™

The EasyLog BT app for Android™ can be downloaded from the Google Play store for free. Used with an Android™ smart phone or tablet, the app provides complete access to the EL-BT-2 data logger for setup, monitoring, data download, analysis, and sharing. The following screen shots were taken from a Nexus 10 tablet.

Typical Real Time Screen
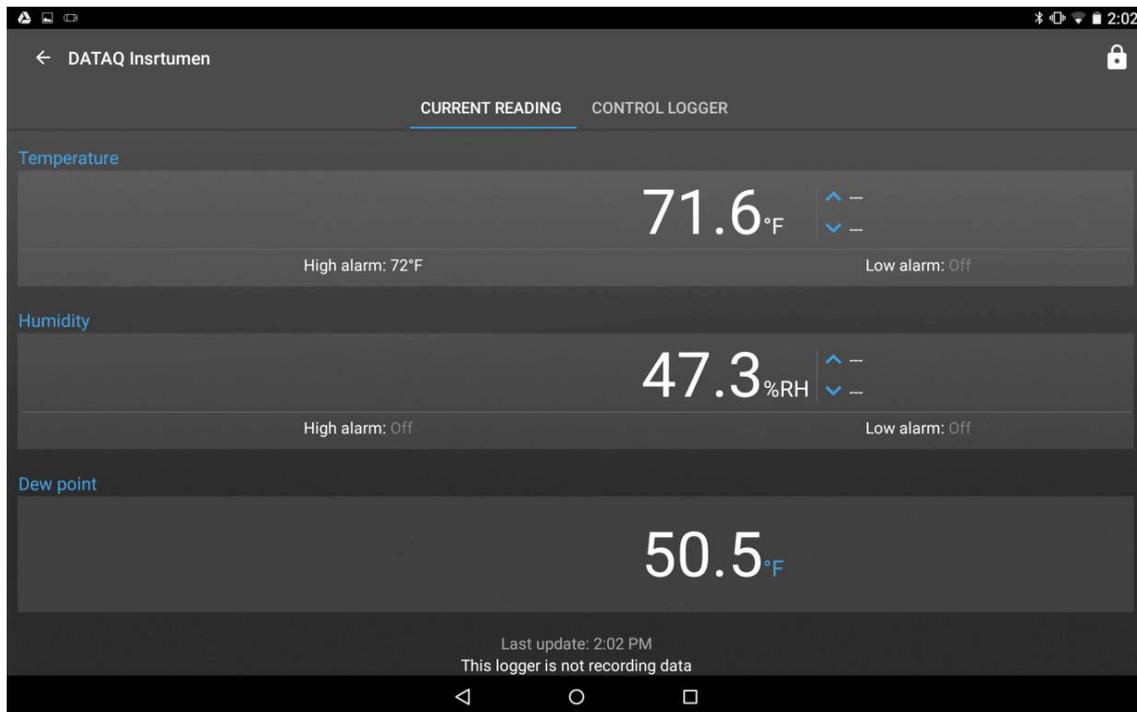
Typical Logger Setup Screen
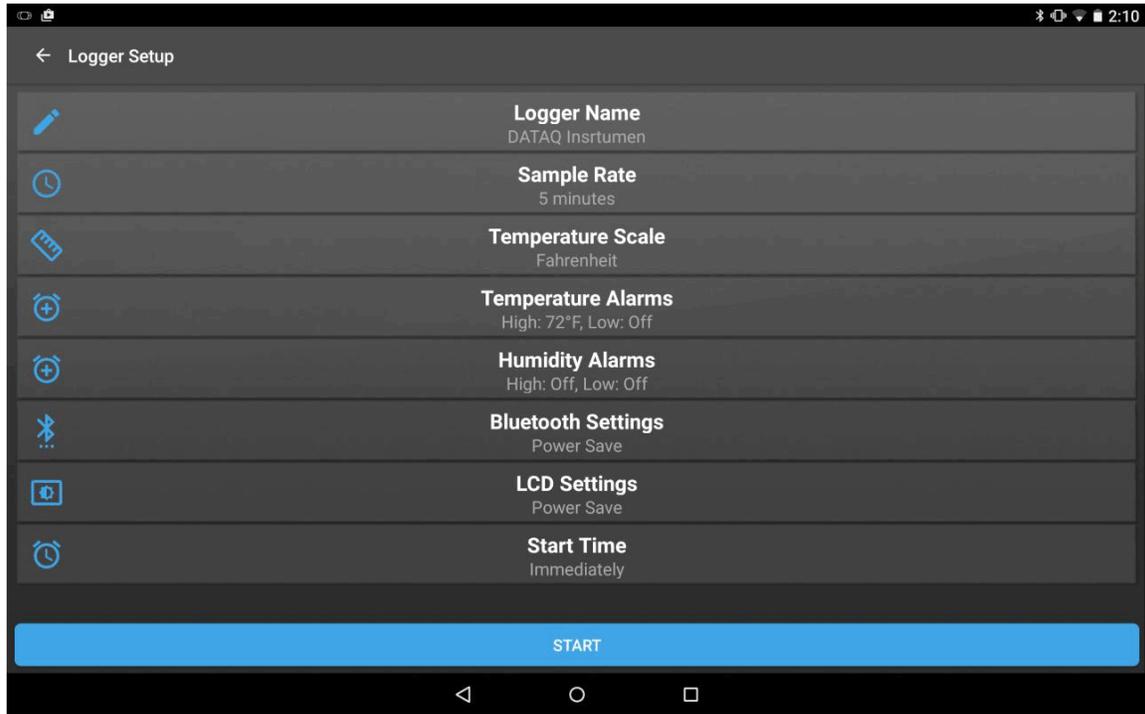
Typical Logger Data Screen

| Specification	Temperature	Humidity
Measurement range	-20 to +60°C (-4 to +140°F)	0 to 100% RH
Resolution	0.1°C (0.1°F)	0.1%
Accuracy (overall error)	±0.4°C (±0.7°F) typical (see below)	±2%RH typical (see below)
Operating temperature range	-20 to +60°C (-4 to +140°F)	
Battery life	6 months (at 25°C in power save mode)	
Dimensions	102 x 51 x 20mm (4.01 x 2 x 0.78 in)	
Environmental protection	IP55	
EasyLog BT app for Android	Version 4.0 (Ice Cream Sandwich) and later	
Connection Distance	Class 2 Radio 10m (30 ft)	

EL-BT-2 Series Sensor Accuracy Data

Typical and maximal tolerance for temperature sensor in °C.
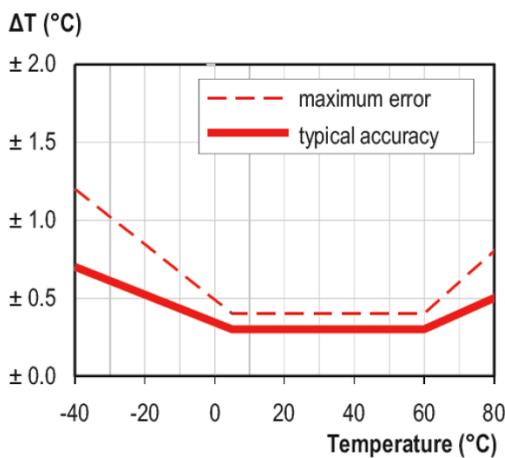
Typical and maximal tolerance at 25°C for relative humidity.
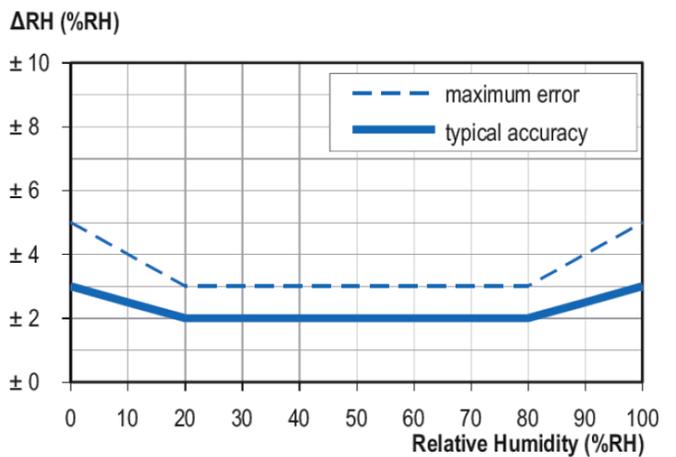
Typical accuracy of relative humidity measurements given in %RH for temperatures 0 to 80°C.
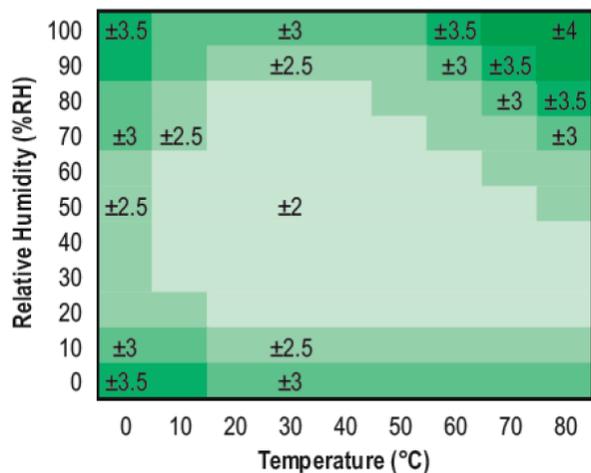
Operating conditions
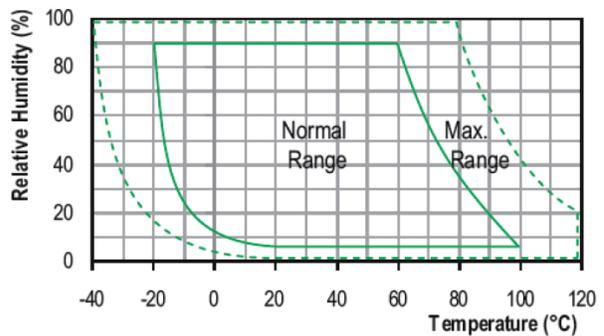
Long term exposure to humidity levels outside of the 'Normal Range' may temporarily offset RH measurements (±3%RH after 60 hours). Once returned to less extreme conditions the device will slowly return towards calibration state.

When tracking changes in ambient conditions, the response time of the humidity sensor in your data logger is approximately 20 minutes to reach 90% of the reading. However, if you are measuring step changes in humidity (for example if calibrating the product) it is advised that you leave the unit for up to four hours to ensure that it has enough time to settle at the new level. It is worth remembering that the value of relative humidity is of course sensitive to temperature variation. As an example, at a relative humidity of ~90%RH at ambient temperature, a variation in temperature of 1°C will result in a change of up to -5%RH. Therefore when comparing multiple devices or calibrating them, any temperature variations must be considered.

Ordering Guide

Description	Order No.
EL-BT-2 Bluethooth-enabled temperature and humidity data logger with USB cable, wall mount, and software for Windows.	EL-BT-2
Optional Accessories	

101085 Power supply adapter (USB to AC).	**101085**	**101017-RPS** Australian Adapter for power supply 101085.	**101017-RPS**
101017-RPE European Adapter for power supply 101085.	**101017-RPE**	**101017-RPK** UK Adapter for power supply 101085.	**101017-RPK**
101017-RPA SPARE US Adapter for power supply 101085 (one already ships with 101085).	**101017-RPA**		

Included

EL-BT-2
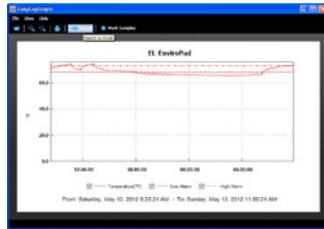
Software via download

USB Cable (1 meter)

Wall Mount

Optional Accessories

101017-RPS   **101017-RPK**   **101017-RPE**   **101017-RPA***

101085 power supply

*USA adapter is included with purchase of 101085

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Data Acquisition Product Links

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