EL-IOT-SP-TH+

High-Accuracy Temperature & Humidity Data Logger | Cloud-Connected

EasyLog

Your data, anytime, anywhere

High-accuracy temperature and humidity data logger, featuring Wi-Fi connectivity to the EasyLog cloud, alarm warning light, audible sounder and hot-swap smart probe technology for seamless annual recalibration.

- Hot swappable smart probe(s) eliminate the need to disconnect and return your data logger for calibration
- Industry-leading calibrated accuracy of ±0.25°C from -30 to 80°C
- Export to PDF or Excel formats with ease
- Real-time data automatically uploaded to the EasyLog Cloud
- Instant local alarms via sound and LED indication. Real-time remote email and SMS alarms
- Audit button for easy data verification
- Onboard memory for 300,000 readings. Unlimited secure cloud storage
- Extensive data analysis tools with the EasyLog Cloud including Max and Min values
- Remotely access your recorded data from your PC, a smartphone or a tablet (iOS and Android compatible)
- Quick device setup in the App

The EL-IOT-SP-TH+ is simple to set up and once configured the device can be placed anywhere within range of your WiFi network, continually monitoring and recording your data to the EasyLog Cloud. You can then use the Cloud to access, analyse and share your data from any internet-connected device worldwide.

The EL-IOT-SP-TH+ can be set with high and low alarms. If one of your parameters is breached, an instant alarm is activated. Alarm options include email alerts (which can be sent to one or multiple email addresses), SMS messages, and indicator and sounder alerts on the device. Audit marks can be created in the data at the touch of a button.

The device can be powered using the batteries supplied or with a mains adapter (sold separately), and is provided with a wall mountable bracket for easy installation.

Cloud

Temperature Humidity

SPECIFICATIONS

UKCA CE

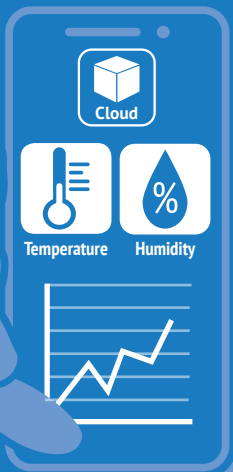|	
Temperature Range	-30 to +80°C (-22 to +176°F)
Temperature Resolution	0.01°C
Temperature Accuracy*	±0.2°C (+5 to +60°C) (±0.4°F (+41 to +140°F)) (Typical) ±0.8°C (-20 to +80°C) (±1.5°F (-4 to +176°F)) (Maximum)
Humidity Range	0 to 100%RH
Humidity Resolution	0.1%
Humidity Accuracy (At 25°C)*	±1.8%RH (20 to 80) (Typical) ±4%RH (0 to 100) (Maximum)
Logging Period	10 seconds to 12 hours (user selectable)
Transmission Interval	1 minute to 24 hours (user selectable)
Battery Life	1 year (Typical)
Battery Type	4 x AA 1.5V batteries (or via mains adapter)
Dimensions	94 x 83 x 31mm
Probe Cable Length	2m (79")
Operating Temperature Range of Logger	-18 to +55°C (0 to +131°F) (batteries) -20 to +60°C (-4 to +140°F) (power supply)
Environmental Rating	IP54 (splash proof)

*Refer to Sensor Accuracy & Information

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EasyLog Cloud
Your data, anytime, anywhere.

Easily access your most important data, anywhere

Connect data loggers from multiple sites in one account

Automatic email alerts and SMS

Remotely manage all of your data logger devices

Graph, review and analyse your data
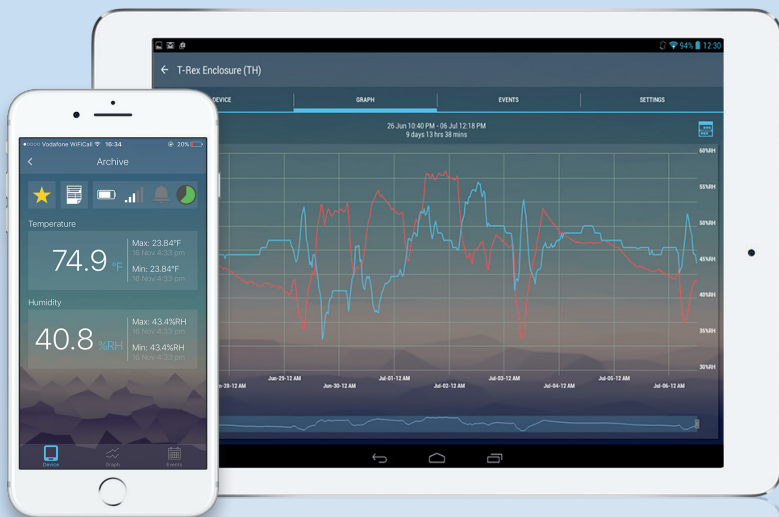
Audits are easy with our event log system

Secure Cloud storage

Configurable user profiles

EasyLog Cloud App

Available for Android and Apple devices, the EasyLog Cloud app enables you to monitor and manage your wireless sensors on the go.

GET IT ON **Google Play**

Download on the **App Store**

Access your vital data from any internet-enabled computer, tablet or mobile device with EasyLog Cloud. From single locations to worldwide operations, the system is perfectly scalable and can run through your existing wireless networks.

Critical events are notified to specific users in seconds via an alarm system that's easily tailored to your exact requirements.

Data is accessible 24/7 and powerful online tools make it simpler than ever to view, compare and analyse readings. An audit trail is automatically created that includes both system and data events.

Starter and Professional accounts are available, always flexible and with no locked-in contracts.
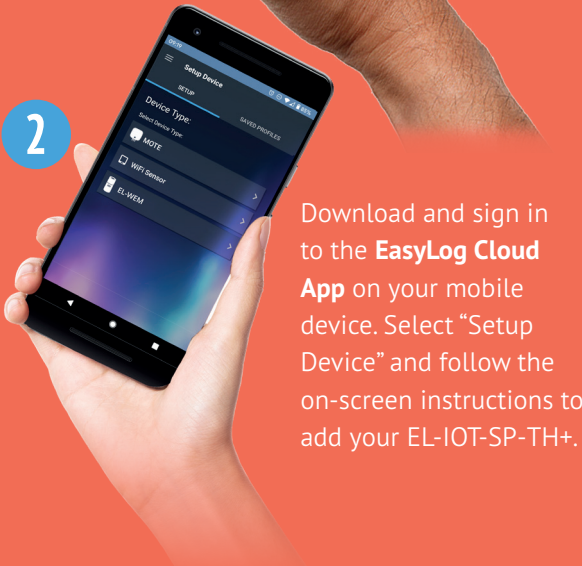
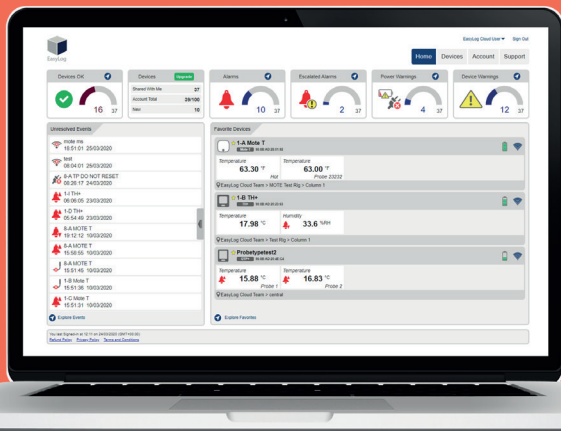lascarelectronics.com

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CONNECTING TO THE CLOUD

1 Install the batteries.

2 Download and sign in to the **EasyLog Cloud App** on your mobile device. Select "Setup Device" and follow the on-screen instructions to add your EL-IOT-SP-TH+.

3 You can now view the EL-IOT-SP-TH+'s data and change settings either in the EasyLog Cloud App or by visiting your account at: **www.easylogcloud.com**
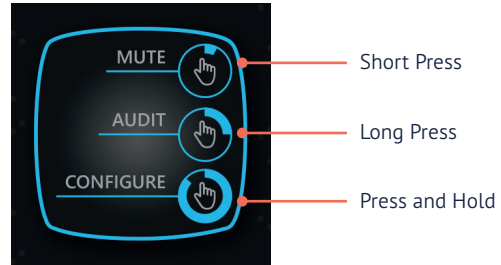
STATUS INDICATORS

The EL-IOT-SP-TH+ has a sounder and four indicators that clearly indicate its current status:

Indicator	✅	🔔	❗	📶
Status	Device in operation	Alarm	Battery Low	WiFi Active

The sounder is active whenever there is an alarm.
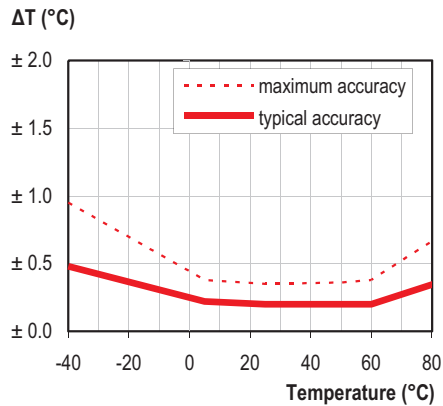
BUTTON FUNCTIONS

The main button is used to control the device functions, some of which also create a record in an Event Log, which can be viewed on the Easylog Cloud website.
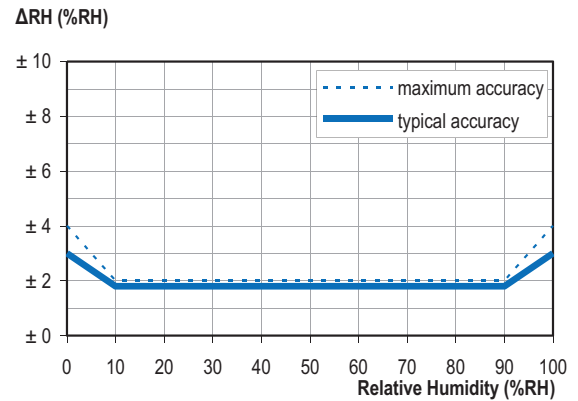
MUTE — Short Press
AUDIT — Long Press
CONFIGURE — Press and Hold

	Button Press		
	Short press < 1s	Long press > 1s-8s	Press and Hold > 8s
Function	Mutes the alarm sounder	Reset an alarm, creates an audit event in the record, forces data synchronisation with the Cloud	Activates configuration mode to reconnect with the App

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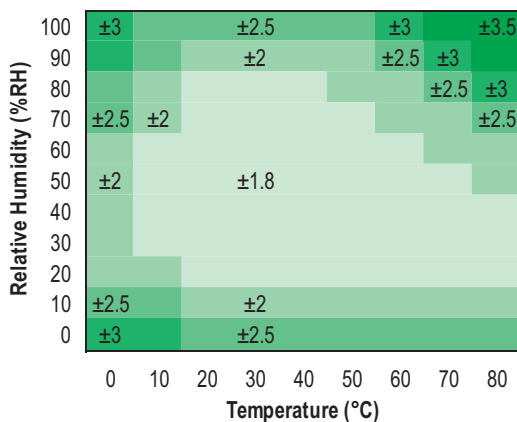## SENSOR ACCURACY & INFORMATION

Typical and maximal tolerance for temperature sensor in °C.
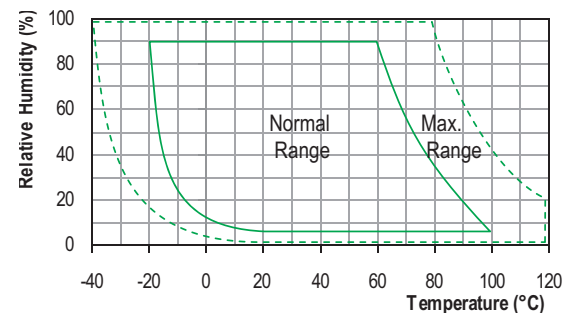

Typical and maximal tolerance at 25°C for relative humidity.

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.

The sensor is IEEE 802.11bgn* (2.4GHz) compliant, supports WPA/WPA2/WPA3 encryption and enterprise networks (PEAP, TTLS).

*MAC Address starting 98:8B:AD:2....... only

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INCLUDED IN THE BOX

BAT 1V5 AA PK4
4 x AA 1.5V
alkaline batteries

**EL-IOT
WALL BRACKET**
Wall mounting bracket
with magnets

EL-SP-TH+
Temperature and
Humidity Probe

ACCESSORIES

BAT 1V5 AA PK4
4 x AA 1.5V
alkaline batteries

PSU EL-IOT
Power supply

**EL-IOT
WALL BRACKET**
Wall mounting bracket

EL-SP-TH+
Temperature and Humidity Probe

ALSO IN THE RANGE

EL-IOT-1
Ambient temperature
data logger

EL-IOT-SP-TC
Wireless thermocouple
temperature data logger

EL-IOT-SP-TC
High accuracy temperature
and humidity data logger

Vist lascarelectronics.com/data-loggers
to see our full range of data loggers and measuring devices

BATTERY INFORMATION

We recommend that you replace the batteries annually, or prior to logging critical data. Use only AA 1.5V alkaline batteries.

The logger does not lose its stored data readings when the batteries are discharged or replaced. However, the logging process will stop and will not resume until the batteries are replaced or a power supply is connected.

Battery life is dependent on: transmission period, WiFi encryption method, signal strength between router/access point and the EL-IOT logger, presence volume and type of WiFi traffic from other devices, sample rate, operating temperature and duration of alarms.

CALIBRATION CERTIFICATES

Lascar offers a Traceable Calibration Certificate Service for temperature and humidity sensors. Using reference equipment which has been calibrated by a UKAS/NIST accredited laboratory and using apparatus traceable to national or international standards. For more information please see www.lascarelectronics.com.

TECHNICAL INFORMATION

Power Supply Voltage	9Vdc, 300mA
Operating Environment (battery power)	-18 to +55°C, 5% to 85% RH, 75kPa to 106kPa
Operating Environment (power supply)	-20 to +60°C, 5% to 85% RH, 75kPa to 106kPa
Transportation and Storage Environment	-20 to +60°C, 5% to 85% RH, 75kPa to 106kPa
Net Weight	222g
Recommended Wall Fixing Screws	3.5 x 20mm, countersunk head, cross recessed, stainless steel

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