

EDGE IN-SITU

DATALOGGER & ALARM



BLE



WiFi



Cellular

Dual-Zone Environmental Monitoring with ASTM F2170 Compliance

EDGE In-Situ is a high-precision data logger built for applications where understanding moisture dynamics between ambient and enclosed environments is critical.

Equipped with internal ambient temperature and humidity sensors and an external in-situ probe for embedded RH and temperature measurements, it provides dual-zone insights for drying behavior, preservation, and long-term monitoring needs. The device calculates and displays specific humidity (g/kg or GPP) for both zones, with a clear visual indicator of moisture flow direction, enabling accurate decisions in line with ASTM F2170 standards.

A fully integrated perimeter-sensitive flood sensor helps detect sample contamination by notifying users if liquid water reaches the probe or surrounding area.

With WiFi or LTE-M connectivity, an ultra-clear e-ink display, and both audible and visible alarms, EDGE In-Situ combines precision, durability, and real-time alerts. It's ideal for flooring compliance, restoration, facility audits, and any scenario requiring accurate RH profiling over time.

Sensors & Monitoring



In-Situ probe
Temperature



In-Situ probe
Humidity



Ambient
Temperature



Relative
Humidity



Mold
Index



Digital
Input



Power
Disruption



Location
Cellular Only

- Integrated Ambient Temperature and Relative Humidity Sensor.
- **Calculates & Displays:** specific humidity for ambient and In-Situ Sensor
- Up to 2 years **battery life** (4 x AA replaceable Alkaline)

Real-time Alarms

- **High & Low** ambient and in-Situ Temperature and Humidity alarms.
- **Flood Detection**, Door Magnet or Dry contact Real-Time Alarms.
- **Mold Index** Calculation and Mold risk Warnings.



Phone Call



Text



Email



Audible



Visible

EDGE's Special Features

Advanced Monitoring, Alarms, and Seamless Connectivity

Connects directly to WiFi or Cellular (No gateway required)
Alarms via Email, SMS, Phone Call
Power Disruption and Re-connection Notification
Audible and Visual alarms
Real-time BLE streaming
Automatic WiFi-to-cellular rollover (in Cellular model)
Works on 4xAA batteries (up to 2 years) or USB-C power
Super user-friendly setup with QR scan
Integrated full-length flood sensor around the base

Display & Interface

Graphical e-paper screen shows:

- Real-time data
 - Active alarms
 - Battery, Connection and power status
- Audible and visual alarms directly on device.

Technical Specifications

Built in sensors		Temperature and Relative Humidity (RH)
Operation Temperature range	°C	-20 to +70
	°F	-4 to +160
Ambient Temperature Measurement Accuracy		±0.2 °C (±0.36 °F)
In-Situ Probe Temperature Measurement Accuracy		±0.1 °C (±0.18 °F)
Both Temperature Sensors Reporting Resolution		0.1
Both RH Sensors measurement range		0-99% non-condensing
Ambient RH Measurement Accuracy		±1.8% RH (at 25 °C, 10-90%)
In-Situ Probe RH Measurement Accuracy		±1.5% RH (at 25 °C, 10-90%)
Interface		Wi-Fi - IEEE 802.11 b/g/n - 2.4 GHz BLE (Bluetooth Low Energy) - 2.4 GHz Cellular LTE-M & 2G (all band - Global) *
FCC ID	WiFi	2AC7Z-ESPWROOM32
	Cellular	2AJYU-8VC0001
Power Supply	Internal	4 x AA batteries
	External	5V DC Standard USB-Charger
Display Update Temperature Range	°C	0 to +50
	°F	+32 to +122
Out of this range, display updates are paused		
Internal Memory Capacity		49,000 Record of each measured Parameter
Recoding interval		1 to 30 minutes
Syncing interval (sending data to the cloud)		Real-time Alarms - 10 minutess to 7 days

* Cellular model - with global e-sim



Made in Canada

LoggerFlex Cloud Platform

Precision Monitoring for In-Slab and Ambient Conditions

Continuous logging at short, customizable intervals
Detailed reports including Min/Max, Peak RH/Temp
Supports ASTM F2170 compliance tracking
Data consolidation and analysis across multiple devices
Tamper-proof activity logs with time-stamped alarm
Interactive graphs and long-term trend analysis
Geographical device management via map view
Accessible on both mobile and desktop devices
Team collaboration with role-based access control

Connectivity

WiFi for continuous cloud sync and Real-time alarms
BLE for smooth real-time data broadcast
Cellular with automatic WiFi failover. (Cellular model)

Designed to meet the performance requirements
of the **ASTM F2170** Standard.