



ESSENTIA

DATALOGGER & ALARM





Reliable Ambient Monitoring with Smart Alerts and Mold **Risk Detection**

The EDGE Essential is purpose-built for accurate ambient temperature and humidity monitoring in preservation-sensitive environments such as museums, archives, storage spaces, offices, server rooms, and residential or commercial buildings. With optional door and flood sensors, mold risk notifications, and seamless WiFi or cellular connectivity, it enables early detection of unfavorable conditions and supports long-term environmental tracking for mold prevention, utility consumption audits, and usage analysis across agricultural, residential, and commercial settings. Tool-free installation, adjustable sampling intervals, and a powerful cloud platform make EDGE Essential a dependable solution for everyday monitoring without the complexity of external probes or certification requirements.

Sensors & Monitoring



Ambient Temperature



Relative Humidity



Power Disruption



Digital Input



Mold Index



Cellular

Location Cellular Only

- Integrated Ambient Temperature and Relative Humidity Sensor.
- Calculates: Feels Like Temperature, Dew Point, Vapor Pressure (VP), Vapor Pressure Deficit (VPD), and Mold Index
- One (1) **Digital Input** (Dry Contact) for Door Magnet or Flood Sensor.
- Up to 2 years **battery life** (4 x AA replaceable Alkaline)

Real-time Alarms

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











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

Display & Interface

Graphical e-paper screen shows:

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

LoggerFlex Cloud Platform

Powerful Web App with Compliance-Built Features

Continuous recording at short, adjustable intervals
Comprehensive reports including Min/Max and Peak Points
Specialized VPD reporting for agricultural monitoring
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-tima alarms BLE for smooth real-time data broadcast Cellular with automatic WiFi failover. (Cellular model)

Technical Specifications

Built in sensors		Temperature and Relative Humidity (RH)
Operation Temperature range	°C	-20 to +70
	°F	-4 to +160
Temperature Measurement Accuracy		±0.2 °C (±0.36 °F)
Temperature Reporting Resolution		0.1
RH measurement range		0-99% non-condensing
RH Measurement Accuracy		±1.8% 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
FCC ID	Cellular	2AJYU-8VC0001
Power Supply	Internal	4 x AA batteries
Power Supply	External	5V DC Standard USB-Charger
Display Update Temperature Range	°C	0 to +50
Out of this range, display updates are paused	°F	+32 to +122
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





