INTRODUCING BLOCK FAMILY OF DATALOGGERS

WiFi

Cellular

BLOCK Datalogger & Alarm

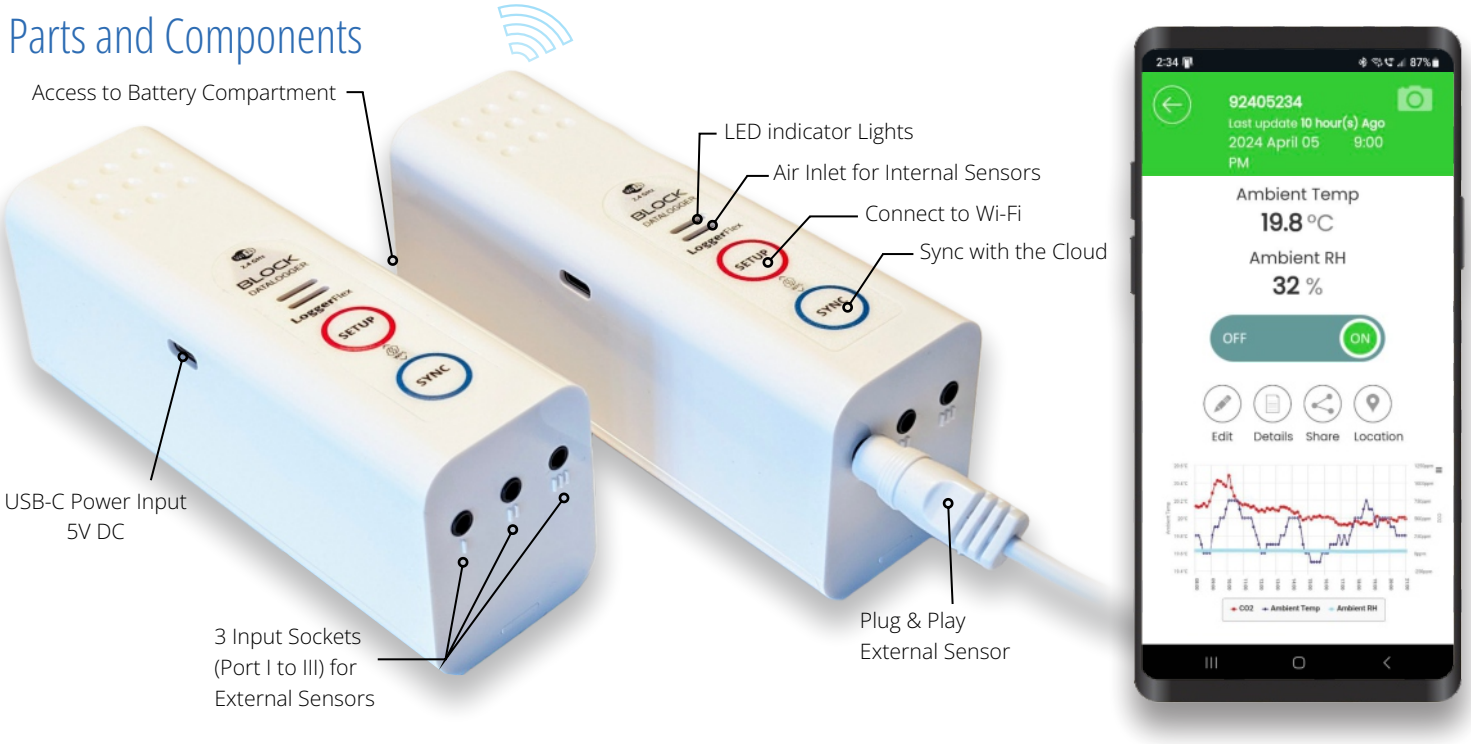
The BLOCK family of Data Loggers includes two versions: WiFi and Cellular. Both versions are designed for efficient data collection, real-time alarms, and extended battery life. The Cellular version offers direct data transfer over cellular networks, while the WiFi version connects seamlessly to existing WiFi networks, ensuring flexible monitoring solutions. With advanced power management, both versions support high-frequency measurement sampling and immediate alerts without requiring additional gateways.

General Technical Specifications of All BLOCK Family Products

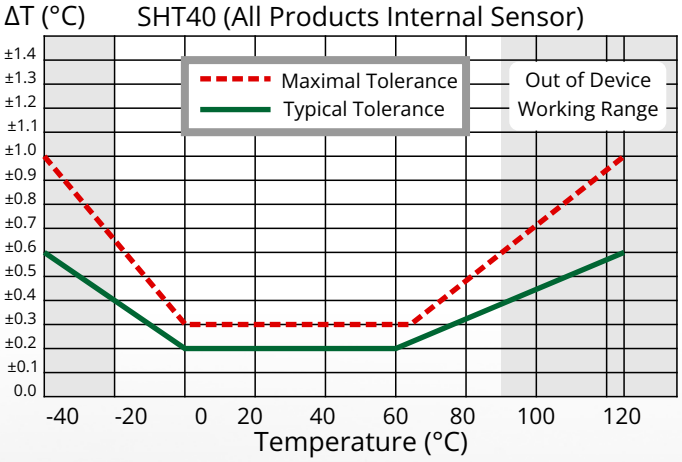
Built in sensors		Temperature and Relative Humidity (RH)
Power Supply	Internal	4 x AA batteries
	External	5V DC Standard USB-Charger
Temperature measurement range	°C	-20 to +70
	°F	-4 to +160
Temperature reporting resolution		0.1
RH measurement range		0-99% non-condensing
Interface		Wi-Fi - IEEE 802.11 b/g/n – 2.4 GHz
FCC ID	WiFi	2AC7Z-ESPWROOM32
	Cellular	2AJYU-8VC0001
Max TX power		20 dBm (100 mW)
Internal Memory Capacity		64,000 Record of each measured Parameter
Record intervals		1 minute to 30 minutes (down to 5 sec. by order)
Upload intervals		1 hour to once a week (down to 1 min. by order)
Dimensions	Height	H = 133 mm (5 $^{15}/_{64}$")
	Length	L = 53 mm (2 $^{3}/_{32}$ ")
	Width	W = 43 mm (1 $^{11}/_{16}$")

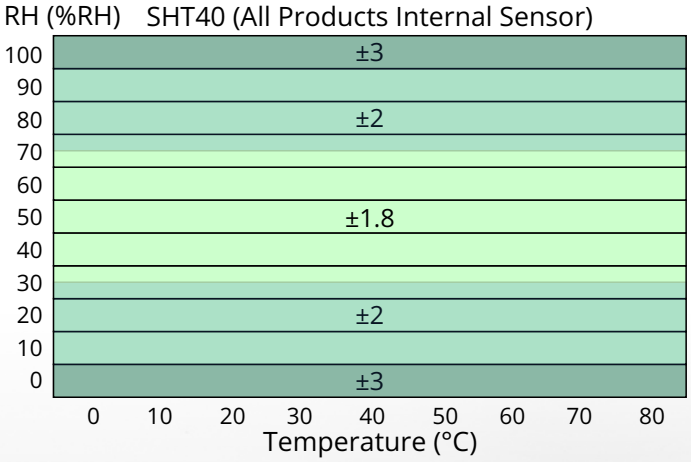
GENERAL SPECIFICATIONS OF BLOCK FAMILY OF DATALOGGERS

Parts and Components



Internal Sensor's Accuracy





Compliance

IEEE 802.11 b/g
NIST Traceable
FDA CFR 21 (Part 11)
RoHS
CE EN 61010-1 3rd edition

LOGGERFLEX

Cellular & WiFi Data Recorder & Alarm

BLOCK ESSENTIAL

WiFi Version's Part Number:BLES00 Cellular Version's Part Number:ESMOBI

Available in Two (2) Variations

WiFi

Cellular

PORT I	Not in Use
PORT II	Digital Input (optional)
PORT III	Flood Detector (optional)

BLOCK Essential

Ideal for monitoring temperature and humidity in museums, agriculture, and property management, BLOCK Essential functions as an electronic thermograph and hygrograph, generating tailored reports for preservation, food safety, and agriculture.

Key Features:

Automated Alarms: Sends phone calls, texts, and email alerts if measured values exceed set thresholds or if digital inputs are activated.

Mold Growth Prediction: Calculates a "Mold Index" (0-100) to predict mold growth based on softwood conditions. Users can set index-based alarms for proactive mold prevention.Data

Analysis & Reporting: In addition to standard reports like detailed records, graphs, and min-max-average reports, it generates specialized data for food safety, vaccine stability, and environmental metrics such as vapor pressure deficit (VPD), dew point, EMC, and specific humidity.

Data Security: LoggerFlex ensures tamper-proof, FDA-compliant data storage with daily backups. Digital Tracing logs all interactions, supporting transparency and audit accountability.

Extra Functions: Equipped with two digital ports, BLOCK Essential also serves as a WiFi-based flood detector and phone dialer, supporting an optional water leak detection cable. It sends calls, texts, and emails when water leaks are detected or if external inputs like fire alarms or door magnets are activated.

Monitoring Capabilities

Record & Send Alarm (Internal) | Record & Send Alarm (Detachable) | Only Recording

Temperature | **Relative Humidity** | **Mold index** | **Location** (Cellular Only) | **Flood Detector** | **Digital Input**

Technical Specifications

Weight	300 gr | 10.6 Oz (including 4 x AA Alkaline batteries)
Digital Input type	Passive (Dry Contact, Door Sensor, Switch, PLC Output, etc.)
Temperature and RH Specifications	Refer to BLOCK Family general Specification Sheet
Mold index range	0 to 100
Mold Growth Prediction Alarm	Can be configured to any threshold

Refer to the BLOCK Family "General Specifications" (page 2) for more technical details.

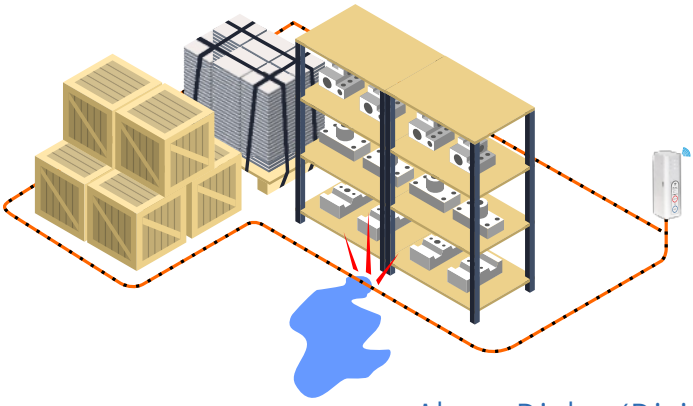
Flood Detector Function

Certain members of the BLOCK Datalogger family feature a dedicated port for connecting a flood detection sensor. Our fully length-sensitive flood sensor cable can be extended up to 100 meters (330 feet), providing extensive coverage. In the event of a flood, the system not only triggers visible and audible alarms but also instantly sends alerts via call, text, and email to an unlimited number of recipients. Advanced algorithms intelligently filter out false alarms caused by routine activities like mopping, ensuring reliability and minimizing unnecessary disruptions.

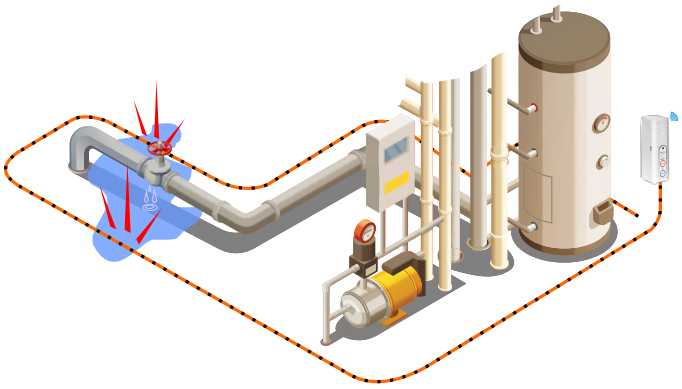
Flood Detector Installation Strategies

Pipe Leak Detection: Couple the detector cable along the entire length of pipes to detect and address leaks at the earliest possible moment.

Protecting Important Assets: Secure the perimeter around valuable items by encircling them with the detector wire, ensuring immediate detection of any approaching water.



Containing the Risk Source: Surround potential risk sources with the detector cable to promptly identify and contain leaks.



Alarm Dialer (Digital Input) Function

Some members of the BLOCK Datalogger family are equipped with a dedicated digital input port, enabling seamless integration with a wide range of digital input sources, such as switches or PLC digital outputs. This functionality allows the system to relay alarms from connected devices remotely and instantly to an unlimited number of recipients via call, SMS, and email. For example, in the event of a fire alarm activation, the system can immediately notify all residents of a building, ensuring rapid awareness and response. Additionally, it serves as an industrial-grade dialer, eliminating the need for a landline or the ongoing cost of maintaining a cellular service, making it a highly cost-effective and reliable alarm communication solution. Furthermore, the system can document alarm events with a secure, non-manipulatable timestamp, providing reliable records for compliance and analysis.

LOGGERFLEX

MOLD PREDICTION FUNCTION

Your Shield Against Mold Growth

BLOCK Essential is an advanced environmental monitoring device designed to safeguard your property and health by continuously tracking temperature and relative humidity (RH). Equipped with state-of-the-art sensors, it calculates the Mold Index in real time, providing an early warning system to prevent mold growth before it becomes a problem.

What is the Mold Index?

The Mold Index is a precise, scientific measure of mold growth potential, represented on a scale from 0% to 100%, where 0% indicates no risk of mold and 100% represents severe, widespread mold contamination. It serves as a critical tool in understanding and preventing mold growth, helping you take timely action to protect your space.

Mold Index Levels:

0% - 15% (No Growth): The environment is safe, and conditions are unfavorable for mold growth. Regular monitoring ensures these conditions are maintained.

16% - 33% (Initial Signs of Mold): Mold spores begin germinating, though growth may only be detectable under a microscope. These early stages require monitoring to prevent visible growth.

34% - 50% (Visible Mold): Small mold spots start appearing, visible to the naked eye. These conditions call for immediate attention to mitigate the risk.

51% - 66% (Moderate Growth): Mold begins to spread, covering localized areas. Ventilation, dehumidification, and cleaning are necessary to stop further development.

67% - 83% (Extensive Growth): Mold growth is widespread, affecting significant portions of surfaces. Structural damage and health risks increase, demanding professional remediation.

84% - 100% (Severe Mold Contamination): Mold has heavily colonized the area, covering the majority of surfaces. Immediate action is critical to address the contamination and prevent further health and structural damage.

BLOCK Essential continuously monitors temperature and humidity, two key drivers of mold growth, and calculates the Mold Index in real time. This empowers you to detect mold risk early and take preventative measures before it becomes visible or causes harm.

What actions should I take if I receive a mold alarm?

When you receive a mold alarm from BLOCK Essential, it means environmental conditions are promoting mold growth, and immediate action is needed. Start by reducing humidity using a dehumidifier, improving ventilation, and fixing leaks or water intrusion. Regulate temperature by lowering it to disrupt mold-friendly conditions. Inspect the area for visible signs of mold or dampness, especially in hidden spots like behind furniture or under carpets. Clean small mold patches on non-porous surfaces with a mild detergent or mold remover while wearing protective gear. For severe or widespread growth, consult a professional mold remediation specialist to address the issue thoroughly. Taking prompt action prevents health risks, structural damage, and costly repairs.

No WiFi

Plug & Play

LoggerFlex No Sim - Cellular Direct Data Loggers With Worldwide Unlimited Data

Our cellular devices offer unparalleled flexibility and instant connectivity, eliminating the limitations of WiFi by working seamlessly in any location with mobile network coverage.
We recognize the challenges of dealing with complex mobile operator plans, hidden fees, and roaming charges.
That's why our solution provides a straightforward service available in 176 countries, with **no roaming fees**, **no connection fees**, and **no hidden charges**. For just **$2.99 per month**, you get unlimited data and unlimited premium access to our powerful software. This ensures seamless, reliable monitoring and data logging wherever you need it, without the hassles of traditional connectivity options.

Unlimited Worldwide Data
+
Unlimited Cloud Storage
+
Premium Software Access
+
Share Access with Unlimited team members

LOGGERFLEX
Cellular Direct Solution

$2.99
Per
Month

When to Choose Cellular Data Loggers Over WiFi

No WiFi or Coverage Issues: Great for remote or industrial areas with poor WiFi.

Independent from Power Grid: Operates on battery for off-grid monitoring and sends immediate alarms during power outages for timely action.

Remote Locations: Reliable in rural, offshore, or mountainous areas.

Critical Applications: Ensures reliable alerts for security or medical systems.

Redundancy: Provides backup monitoring during network outages.

Easier Setup: No network configuration, just plug and play.

Frequent Staff Changes: Simplifies use without training new personnel on network setups.

Geo-Location Tracking: Perfect for logistics or mobile asset tracking.

On the Move: Ideal for vehicles, shipping containers, or mobile equipment.

Frequent Relocation or Temporary Installations: Easily moved without resetting connections.

Harsh Environments: Performs well in industrial settings with obstructed signals.

LF CLOUD APPLICATION

LF Cloud (LoggerFlex Online Application) is a powerful, cloud-based platform that streamlines data collection and monitoring. Its primary functions include continuous, high-resolution monitoring and 24/7 data access from anywhere, enabling remote, multi-user oversight across different time zones. The application generates industry-specific, customizable reports tailored to the unique requirements of sectors such as pharmaceuticals, food safety, and HVAC. LF Cloud also supports multi-parameter monitoring of various environmental and system parameters, with shared access capabilities for collaborative monitoring among multiple users. As a progressive web application, it is accessible on any device with internet connectivity, requiring no installation and providing a consistent experience across platforms. This comprehensive platform empowers users with actionable insights, robust data management, and enhanced decision-making.

Access from Anywhere, on Any Device, for Multiple Users

Neat Mobile View

Geographical Based Display

Professional Reports

Our alarms will reach you, no matter how far you are.

Phone Call Alarm

Text Message Alarm

Email Alarm

Advance Alarm Function

1 Momentary Minimum & Maximum value Alarms

As the most basic alarm function, 'LF CLOUD' can immediately push an alarm via email, SMS, or phone call if any measured parameter exceeds the defined maximum or falls below the adjustable minimum threshold. This instant alerting ensures that users are promptly informed.

2 Adjustable "Persistent Condition" Alarm

To filter out possible momentary fluctuations, users can adjust the persistence duration of the condition before the alarm goes off. Using this feature, the system only triggers the alarm if the out-of-bounds measured parameter remains beyond defined limits for a certain duration.

3 Adjustable Time-Weighted Average Long-term Alarms

"LF CLOUD" can constantly monitor the parameters to ensure compliance with multiple long-term exposure rules. Rules can be defined by the measured level and duration of exposure, and the system will send an alarm if long-term exposure is detected based on time-weighted average values.

4 Trend change (Drift) detection alarm

The "LF Cloud" can monitor the trend of changes or drift in the measurements and push notifications if the average measured values show a certain percentage higher or lower than previous records at adjustable intervals.

LF Cloud Key Functionality Highlights

Data Security and Privacy: End-to-end encryption.
Activity Logging: Digital tracing of user actions and alarm events.
Frequent Data Backups: Multiple daily backups ensure data integrity.

Multi-channel notifications: Email, SMS, and phone calls.
Alarming: Threshold, persistent condition, and trend-based alarms.

Cross-Platform Access: Compatible with Windows, iOS, Android.
Global Accessibility: Multi-language and multi-time zone support.
Role-Based Sharing: Access controls for collaborative use.

Graphing & Visualization: Customizable data visualization tools.
Custom Reporting: Industry-specific report generation.
Geographic Data Insights: Location-based data visualization.

Utility Billing: Automated cost allocation and submetering.

API Integration: Real-time data access and alerts through API.

Industry-Specific Report Segments in LF Cloud

HVAC Systems | Property Management | Agriculture | Industrial Monitoring | Preservation | Pharmaceutical | Food Safety