LOGGERFLEX 2025

PRODUCT SELECTION CATALOG

LOGGERFLEX

At LoggerFlex, we specialize in designing cutting-edge IoT solutions that redefine monitoring and data management across industries. Our innovative devices are built to seamlessly connect with existing infrastructures like WiFi, cellular networks, and Modbus systems, offering unparalleled flexibility and ease of use. With a focus on precision, efficiency, and sustainability, our products cater to diverse applications, from environmental monitoring and predictive maintenance to energy management and industrial automation. Backed by our powerful LoggerFlex Cloud platform, we provide advanced data logging, real-time alarms, and insightful analytics to empower businesses to make smarter, faster decisions. Explore our 2025 catalog to discover how LoggerFlex is transforming data-driven solutions for a better-connected world.

Table of Contents

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

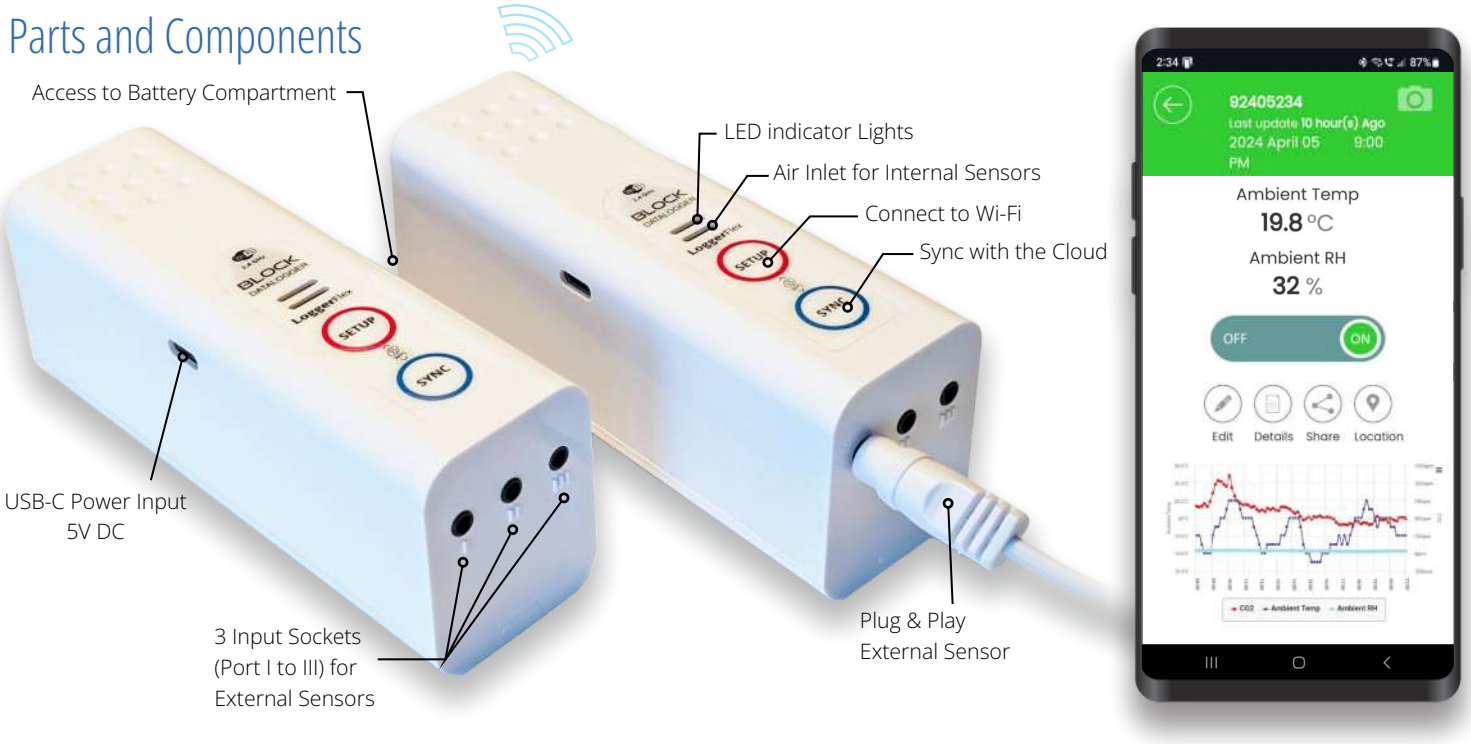
BLOCK Datalogger & Alarm

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.

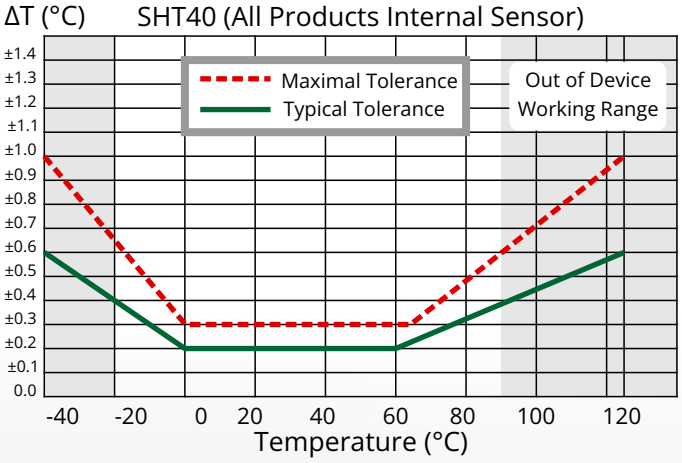
General Technical Specifications of All BLOCK Family Products

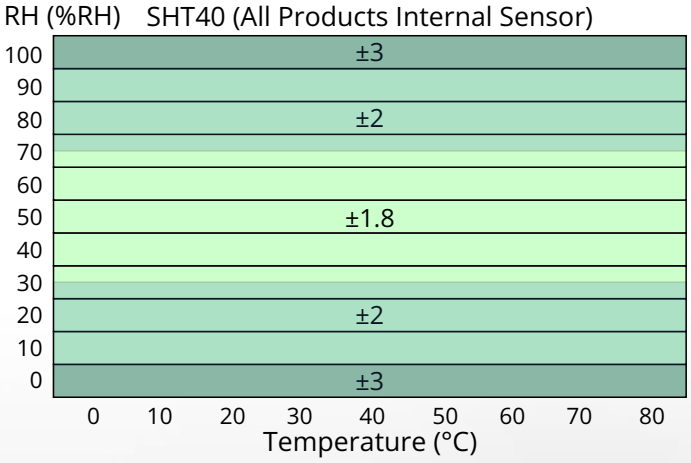
Built in sensors		Temperature and Relative Humidity (RH)
Power Supply	Internal	4 x AA batteries
	External	5V DC Standard USB-Charger
Temperature measurement range	°C	-20 to +70
	°F	-4 to +160
Temperature reporting resolution		0.1
RH measurement range		0-99% non-condensing
Interface		Wi-Fi - IEEE 802.11 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 $^{11}/_{16}$")

Parts and Components



Internal Sensor's Accuracy





Compliance

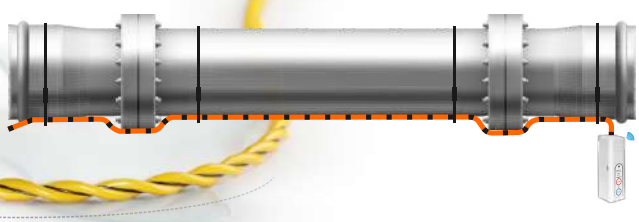
FC
IEEE 802.11 b/g
NIST Traceable
FDA CFR 21 (Part 11)
RoHS
CE EN 61010-1 3rd edition

Flood Detector Function

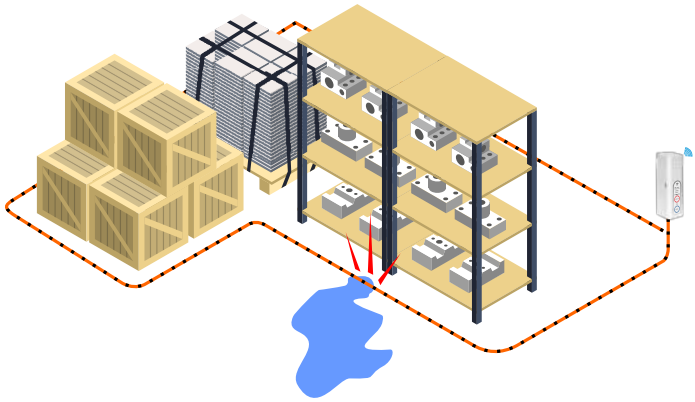
Certain members of the BLOCK Datalogger family feature a dedicated port for connecting a flood detection sensor. Our fully length-sensitive flood sensor cable can be extended up to 100 meters (330 feet), providing extensive coverage. In the event of a flood, the system not only triggers visible and audible 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

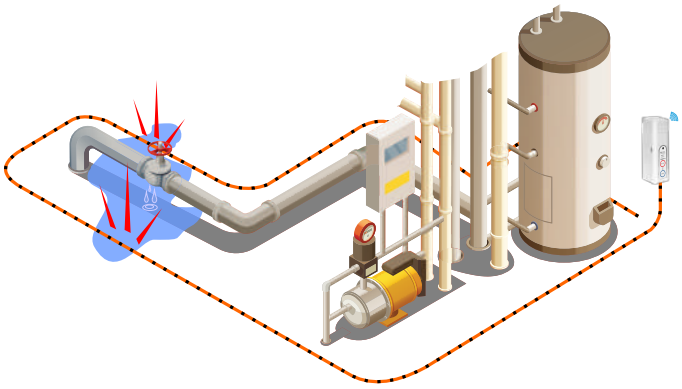
Pipe Leak Detection: Couple the detector cable along the entire length of pipes to detect and address leaks at the earliest possible moment.



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.

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.

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.

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.

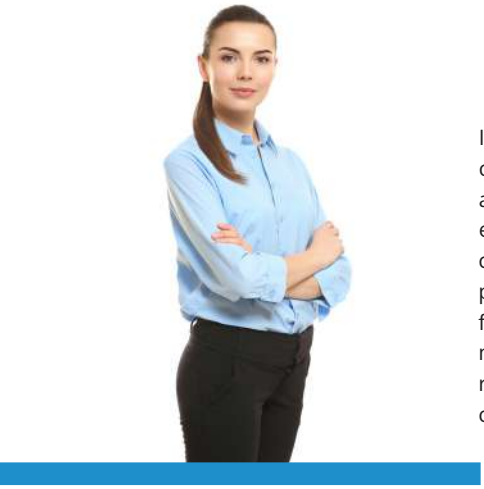
WiFi

Cellular

BLOCK Essential Use Cases

Agriculture

BLOCK Essential is a valuable tool for optimizing agricultural environments. By monitoring temperature and humidity, it generates detailed Vapor Pressure Deficit (VPD) reports, offering critical insights for managing plant transpiration and photosynthesis. High and low-temperature alarms ensure crops are protected from adverse conditions, while real-time notifications allow farmers to take prompt action to maintain optimal growing environments. The device's ability to monitor specific humidity and dew point further aids in preventing crop stress and diseases.



Property Management

In property management, BLOCK Essential addresses common challenges with precision. Its mold prediction alarm tracks temperature and humidity to assess mold growth risks, helping managers intervene early. The temperature alarm protects pipes by detecting frost conditions, while the flood detector alerts instantly to water leaks, preventing significant property damage. The device's alarm dialer function is especially useful in emergencies like fire, allowing property managers to send simultaneous call, text, and email alerts to all residents, ensuring fast and effective communication without monthly costs or landlines.

Preservation

BLOCK Essential excels in preserving artifacts, historical items, and delicate materials. It records temperature and humidity with precision, ensuring conditions are stable and suitable for long-term storage. The advanced trend-detection alarm highlights fluctuations in relative humidity, which can cause more harm to artifacts than consistently high levels, allowing for proactive adjustments. Additionally, the device sends real-time alerts if environmental conditions go out of range, safeguarding valuable collections and ensuring compliance with preservation standards.

Cellular & WiFi Data Recorder & Alarm

BLOCK External Temp

WiFi Version's Part Number:BLXT01 Cellular Version's Part Number:EXTMOB

WiFi

Cellular

Available in Two (2) Variations

WiFi Cellular

●	**PORT I**	External Digital Temp Sensor
○	PORT II	Digital Input (optional)
○	PORT III	Flood Detector (optional)

BLOCK External Temp

Ideal for monitoring temperature in extreme environments, BLOCK External Temp is perfect for applications in industrial processes, cold storage, and environmental monitoring. It supports precise temperature tracking and customizable reporting for diverse needs.

Key Features:

Wide Temperature Range: The external probe operates from -55°C to +125°C, making it suitable for a variety of applications.

Detachable Probe Options: Customers can choose between an ordinary model or a Thermowell pocket for enhanced durability and installation flexibility.

NIST Certification Option: The external sensor is available with or without a NIST traceable calibration certificate, catering to different compliance requirements.

Automated Alarms: Sends phone calls, texts, and email alerts if temperature measurements exceed set thresholds or if digital inputs are activated.Data Analysis & Reporting: Provides detailed records, graphs, and min-max-average reports, and supports specialized applications with customized data for compliance and operational efficiency.

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

Monitoring Capabilities

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

Temp Probe

Ambient Temp

Relative Humidity

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
External Sensor's measurement length	1.5 meters (5 ft) - Extendable up to 9 meters (30 ft.)
External Sensor's measurement range	-55°C to +125°C (-67°F to +257°F)

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

Cellular & WiFi Data Recorder & Alarm

BLOCK Thermo II

WiFi Version's Part Number:BLXT02 Cellular Version's Part Number:BLXTM2

WiFi

Cellular

Available in Two (2) Variations

WiFi Cellular

●	**PORT I**	External Digital Temp Sensor
●	PORT II	External Digital Temp Sensor
●	PORT III	Flood Detector (optional)

BLOCK THERMO II

Ideal for precise temperature monitoring across multiple points, Thermo II is designed for applications in cold storage, industrial processes, and environmental monitoring. With the ability to handle two independent probes, it ensures comprehensive and flexible temperature tracking for diverse needs.

Key Features:

Dual Temperature Monitoring: Supports two independent external probes, each functioning as a separate sensor with individual alarms and recording capabilities.Wide Temperature Range: Each probe operates from -55°C to +125°C, making the device suitable for a variety of applications.

Detachable Probe Options: Customers can choose between an ordinary model or a Thermowell pocket for enhanced durability and installation flexibility.

NIST Certification Option: The external sensor is available with or without a NIST traceable calibration certificate, catering to different compliance requirements.

Automated Alarms: Sends phone calls, texts, and email alerts if temperature measurements exceed set thresholds or if digital inputs are activated.Data Analysis & Reporting: Provides detailed records, graphs, and min-max-average reports, and supports specialized applications with customized data for compliance and operational efficiency.

Monitoring Capabilities

Record & Send Alarm (Detachable) Only Recording

Probe Temp I | **Probe Temp II** | **Ambient Temp** | **Relative Humidity** | **Location** (Cellular Only) | **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
External Sensor's measurement length	1.5 meters (5 ft) - Extendable up to 9 meters (30 ft.)
External Sensor's measurement range	-55°C to +125°C (-67°F to +257°F)

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

External Digital Temperature Sensors

Part Numbers: DSTS15, DS15N0, DS15NB, Tw0525

External Digital Sensors

Standard Digital Temperature Probe 1.5 m (5ft.) - Waterproof stainless steel pocket (Pocket is submersible)

Part Number: DSTS15

-55° to +125°C (-67 to +257°F)
Accuracy: ±0.5°C (0.9°F)

Standard Digital Temperature Probe With NIST Traceable Calibration Test Certificate

Part Number: DS15N0

Default Calibration test point at 0°C (32°F) unless indicated

Standard Digital Temperature Probe With NIST traceable Calibration Test Certificate and Vial Bottle filled with Ethanol

Part Number: DS15NB

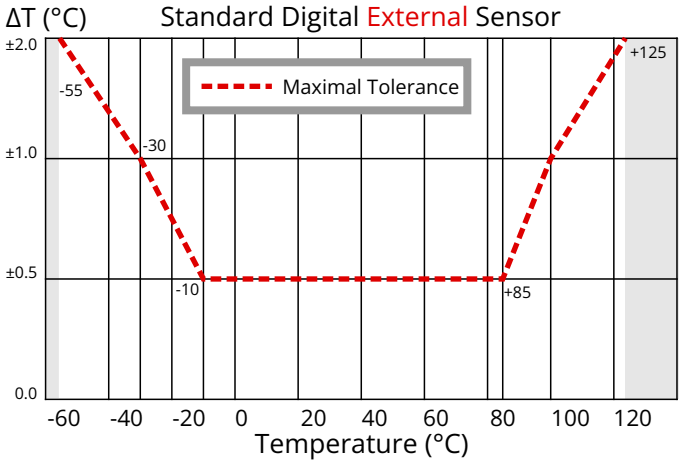
Default Calibration test point at 0°C (32°F) unless indicated

Digital Temperature ½" NPT thermowell Probe 1.5 m (5ft.) - Waterproof stainless steel pocket (Pocket is submersible)

Part Number: TW0525

-55° to +125°C (-67 to +257°F)
Accuracy: ±0.5°C (0.9°F)

Sensors' Accuracy



For External Sensors:

Standard Probes: The sensors included with the products by default are standard probes without a NIST certificate.

NIST Certification: To include a NIST certificate, please indicate "NIST" in your PO. The default testing point is 0°C (32°F) unless otherwise specified.

Thermowell Sensors: Please specify the required pocket length and thread size in your purchase order (PO). By default, the thread size is 1/2" NPT, and the probe length is 1" (25 mm).

Technical Specifications

External detachable Sensor's	°C	-55 to +125
Temperature measurement range	°F	-67 to +257
Temperature reporting resolution		0.1
Default NIST testing point		0°C (32°F)
Length		1.5 meters (5 ft) – extendable up to 9 meters (30 ft)

What is a NIST-traceable calibration certificate?

NIST Traceable Calibration Certificate

NIST traceability for temperature sensors ensures accurate and reliable temperature measurements by linking them to standards maintained by the National Institute of Standards and Technology (NIST). This traceability involves calibrating sensors against certified reference instruments that have been directly or indirectly compared to NIST standards under documented and controlled processes. It is critical for industries like pharmaceuticals and food, where precise temperature control is essential for maintaining compliance with regulatory requirements, such as FDA guidelines. In these sectors, NIST traceability safeguards the safety, quality, and integrity of temperature-sensitive products, including medications and perishable foods, ensuring they remain effective and safe for consumption.

Why do calibration certificates need renewal, and what is “Drift” in temperature measurements?

Drift in a temperature sensor refers to the gradual change in its accuracy over time due to factors like aging, environmental exposure, and wear of components. This deviation can result in unreliable measurements, compromising processes that rely on precise temperature control, such as pharmaceutical storage. Regular recalibration ensures that the sensor maintains its accuracy by aligning it with certified standards. If the drift exceeds acceptable limits or the sensor is no longer reliable after recalibration, it should be replaced to ensure compliance with regulatory standards and safeguard product quality.

How does LoggerFlex simplify and reduce the cost of renewing calibration certificates?

LoggerFlex revolutionizes maintaining a valid NIST certificate by leveraging detachable digital sensors equipped with unique electronic serial numbers and QR codes for seamless identification and certification management. These external probes are calibrated against NIST traceable standards at the factory, and their calibration certificates, accessible online via QR code, remain valid for up to 5 years when the sensor is stored or 3 years when in use. This innovation eliminates the need to send entire dataloggers to labs for recalibration, a process that incurs high costs, shipping delays, and leaves facilities without monitoring or alarm systems.

Instead, when a sensor's certificate approaches expiration, users can simply replace the small, cost-effective probe with a new, pre-calibrated one, ensuring uninterrupted compliance. This approach not only minimizes downtime and reduces expenses but also significantly cuts waste by extending the lifespan of the datalogger itself. By focusing on recalibrating or replacing the probe alone, LoggerFlex offers a sustainable, efficient solution for maintaining high accuracy and regulatory compliance in industries where precision is critical.

BLOCK CO_2 + TEMP + RH

Part Number: BLTCO2

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

BLOCK CO_2 + TEMP + RH

All-in-one WiFi Co_2 Monitoring Solution: Comprehensive Long-Term Exposure and Instant CO_2 Intensity Alarms with Temperature and Humidity Monitoring & Recording

The LoggerFlex BLOCK CO2 monitoring solution stands out as the only device on the market offering a unique long-term exposure monitoring capability. It records CO2 intensity, temperature, and relative humidity while providing real-time alarms via email, SMS, and phone calls for high CO2 levels or out-of-range temperature thresholds. Its advanced feature allows users to define an unlimited number of rules for long exposure level alarms. By continuously calculating the time-weighted average of CO2 intensity over the past hours, the device can trigger specific alarms for prolonged exposure, ensuring prompt actions to uphold air quality and safety standards.

What is CO2 long-term exposure?

CO2 long exposure refers to being continuously exposed to elevated levels of carbon dioxide over an extended period. Unlike short-term exposure, which may cause mild symptoms like drowsiness or headaches, long-term exposure to high CO2 concentrations can have more severe health effects, such as impaired cognitive function, increased heart rate, dizziness, and even respiratory issues. Over time, prolonged exposure to CO2 can impact overall well-being, especially in environments with poor ventilation, such as offices, classrooms, and industrial settings. Consistent monitoring and timely mitigation of CO2 levels are essential to prevent the accumulation of CO2 to hazardous levels, making long-term exposure alarms critical for maintaining healthy indoor air quality and ensuring the safety of occupants.

Monitoring Capabilities

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

CO2 Intensity | Temperature | Relative Humidity | Mold index | Flood Detector | Digital Input

Technical Specifications

Temperature measurement range	-10 to +60°C | +14° to +140°F
Co_2 measurement range and accuracy	400-1,000 ppm: ±(50 ppm + 2.5% of reading) 1,001-2,000 ppm: ±(50 ppm + 3% of reading) 2,001-5,000 ppm: ±(40 ppm + 5% of reading)
Mold index range	0 to 100

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi

BLOCK CO_2+ TEMP + RH Use Cases

A CO2 datalogger is essential in indoor agriculture for monitoring and optimizing carbon dioxide levels, a critical factor for plant growth and photosynthesis. By continuously measuring CO2 concentrations, along with temperature and humidity (RH), it ensures the environment remains within ideal ranges, maximizing crop yield and quality. The ability to monitor all three parameters in one device simplifies operations, reduces equipment costs, and ensures a comprehensive understanding of environmental conditions. Real-time alarms help prevent deviations that could harm plants or pose health risks to workers, supporting efficient resource use and creating a safe, controlled agricultural setting.

A CO2 datalogger in a classroom is vital for monitoring indoor air quality to ensure a healthy and productive learning environment. High CO2 levels, combined with inappropriate temperature and humidity (RH), can lead to discomfort, drowsiness, and reduced cognitive performance among students and teachers. A device that monitors CO2, temperature, and RH in one unit provides a complete picture of air quality, streamlining maintenance and reducing the need for multiple instruments. Real-time alarms and data tracking enable timely ventilation adjustments, improving overall well-being and creating a safer, more effective educational space that complies with health and safety standards.

A CO2 datalogger that also monitors temperature and relative humidity (RH) is invaluable in work environments, offices, and public spaces for maintaining indoor air quality, comfort, and OSHA compliance. Elevated CO2 levels, along with improper temperature and humidity, can lead to fatigue, reduced productivity, and health risks for occupants. By continuously tracking these parameters, the datalogger ensures conditions remain within safe and optimal ranges. It provides real-time alarms for immediate action and generates data to support compliance with OSHA standards and ventilation guidelines, creating healthier, safer, and more comfortable environments for employees and the public.

A CO2 datalogger that also monitors temperature and relative humidity (RH) is invaluable in work environments, offices, and public spaces for maintaining indoor air quality, comfort, and OSHA compliance. Elevated CO2 levels, along with improper temperature and humidity, can lead to fatigue, reduced productivity, and health risks for occupants. By continuously tracking these parameters, the datalogger ensures conditions remain within safe and optimal ranges. It provides real-time alarms for immediate action and generates data to support compliance with OSHA standards and ventilation guidelines, creating healthier, safer, and more comfortable environments for employees and the public.

BLOCK Fluid Pressure & TEMP

Part Number: BLTPRS-XXXX

Pressure sensor range must be selected when ordering, as it is permanently integrated into the device and cannot be changed later.

PORT I	External Digital Temp Sensor
PORT II	Digital Input (optional)
PORT III	Flood Detector (optional)

BLOCK Fluid Pressure & TEMP

The BLOCK Fluid Pressure and Temperature monitoring solution provides precise measurements of fluid pressure and temperature, along with real-time alarms for various applications. It also records ambient temperature and humidity and features two external ports for a flood sensor and a programmable digital input, which can function as a cumulative pulse counter or digital input alarm. With the ability to report pressure in H2Omm, (in addition to MPa, and PSI), it is an excellent choice for depth monitoring in tanks, eliminating the need to insert components into the tank or access its top. This versatility makes it suitable for a wide range of environments.

Available pressure ranges:

0 to 5 bars (0 to 0.1 MPa = 100 Kpa) - Part Number: BLTPRS-0100
Suitable for water tank depth measurement (up to 10 meters)

0 to 5 bars (0 to 0.25 MPa = 250 Kpa) - Part Number: BLTPRS-0250
Suitable for water tank depth measurement (up to 25 meters)

0 to 5 bars (0 to 0.5 MPa = 500 Kpa) - Part Number: BLTPRS-0500

0 to 10 bars (0 to 1 MPa = 1000 Kpa) - Part Number: BLTPRS-001K
Suitable for city water supply pressure

0 to 20 bars (0 to 2 MPa = 2000 Kpa) - Part Number: BLTPRS-002K

0 to 50 bars (0 to 5 MPa = 5000 Kpa) - Part Number: BLTPRS-005K

0 to 100 bars (0 to 10 MPa = 10000 Kpa) - Part Number: BLTPRS-010K

Monitoring Capabilities

Record & Send Alarm (Detachable) Only Recording

Pressure | **Fluid Temp** | **Ambient Temp** | **Relative Humidity** | **Flood Detector** | **Digital Input**

Technical Specifications

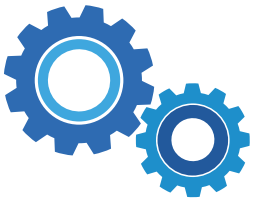
Pressure Sensor's Linearity, hysteresis, repetitiveness	< 0.5% sensor's full range
Thread	1/4" NPT
Digital / Pulse Input	By order - Default = Pulse Counter
External Sensors protection Class and Material	IP65/IP67 - Stainless steel 304
Battery Life	30 Days

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi

BLOCK Fluid Pressure and Temperature Usage in Predictive Maintenance

Industrial Monitoring



Pressurized Systems health and Leak Detection

The BLOCK Fluid Pressure and Temperature monitoring solution is invaluable for detecting leaks in pressurized systems, ensuring safety, efficiency, and system reliability. In coolers and chillers, maintaining stable refrigerant pressure is critical for optimal cooling performance. A refrigerant leak can lead to reduced efficiency, increased energy costs, and potential damage to the compressor. By continuously monitoring refrigerant pressure, the BLOCK device enables early detection of leaks, allowing maintenance teams to address issues before they escalate into costly failures.

In fire extinguisher sprinkler systems, consistent pressure is crucial for readiness during emergencies. The BLOCK device provides constant monitoring of pressure levels, immediately identifying any drops that may indicate leaks or system malfunctions. Additionally, in long pressurized pipelines, such as those in industrial or utility settings, the device can detect pressure anomalies that signal leaks or blockages, ensuring timely interventions to prevent significant losses or operational disruptions. This real-time leak detection capability makes the BLOCK device an essential tool for maintaining the integrity of pressurized systems.

Monitoring Water Filter Efficiency

Installing two BLOCK devices on either side of a water filter enables monitoring of pressure differentials. As the filter fills with debris, the pressure difference between the inlet and outlet increases. The BLOCK devices can detect this change, alerting maintenance teams that the filter needs replacement or cleaning. This ensures optimal water flow, reduces system strain, and prevents costly damage to downstream equipment.

Pressure and Depth Monitoring for Predicting Consumption Patterns

In applications such as water storage or fuel tanks, the BLOCK device can measure fluid pressure and depth to monitor usage trends over time. By analyzing historical data, businesses can predict consumption patterns, schedule refills, and detect abnormalities such as unexpected drops in depth that may indicate leaks or unauthorized usage. This predictive capability improves resource management and reduces operational risks.

Pump Output Pressure Monitoring

Pumps are essential to industrial processes, water and wastewater management, HVAC systems, and building utilities, where maintaining consistent output pressure is crucial for efficiency. The BLOCK device is designed to monitor, record, and document pump output pressure, helping detect gradual declines that could indicate issues such as worn-out components or blockages. By identifying these pressure trends in advance, maintenance teams can take proactive measures to repair or replace components, ensuring uninterrupted operation and reducing the risk of unexpected failures.

HVAC Systems

WiFi Data Recorder & Alarm

BLOCK TEMP + CURRENT

Part Number: BLXTCS

WiFi

O	**PORT I**	External Digital Temp Sensor
O	PORT II	Digital Input (optional)
O	PORT III	Current Clamp (30A AC)

BLOCK TEMP + CURRENT

The BLOCK TEMP + CURRENT is an advanced monitoring device designed to measure temperature and electrical current with precision. It utilizes a non-invasive CT clamp for current measurement, ensuring easy installation without disrupting the electrical system. Key Features and Benefits:

Predictive Maintenance: BLOCK TEMP + CURRENT is equipped with advanced alarms that detect chronic issues in electrical systems by monitoring prolonged current increases beyond preset thresholds. This ensures that alerts are only triggered for sustained abnormalities, avoiding unnecessary disruptions from momentary fluctuations. Its trend detection capabilities further enhance maintenance efficiency by identifying gradual shifts or drifts in current draw patterns, which can signal developing problems. These features enable users to take proactive action, preventing minor issues from escalating into costly system failures and ensuring reliable operation.

Versatile Applications: Ideal for monitoring HVAC systems, motors, compressors, and other electrical equipment, ensuring efficiency and longevity.

Energy Monitoring and Cost Estimation: BLOCK TEMP + CURRENT accurately measures current and estimates energy consumption (kWh), offering detailed insights into usage patterns. It also exports energy data as clear, easy-to-understand charts and calculates estimated energy costs, empowering users to optimize their energy expenses effectively.

Paired with the LF Cloud App, BLOCK TEMP + CURRENT provides real-time data analysis, alarms, and remote access for comprehensive monitoring.

Monitoring Capabilities

Record & Send Alarm (Detachable) Only Recording

AC Current | **Temperature** | **Ambient Temp** | **Relative Humidity** | **Digital Input**

Technical Specifications

AC Current Measurement Range	0 to 30 A
AC Current Measurement Accuracy	±3%
Cumulative energy recording unit	Kwh
Threshold Alerts	Daily, Weekly, Monthly, Yearly, Absolute
Battery Life	6 Months

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

Cellular & WiFi Data Recorder & Alarm

BLOCK MOTION

WiFi Version's Part Number:BLKPIR Cellular Version's Part Number:BCEPIR

WiFi

Cellular

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

BLOCK Motions

The BLOCK Motion is a versatile monitoring device available in WiFi and cellular versions with global connectivity. It combines all the features of BLOCK Essential with a PIR motion detector for enhanced functionality.

Key Features & Use Cases:

Motion Detection: Sends real-time alarms for detected motion, ensuring added security.

Environmental Monitoring: Tracks parameters like temperature and humidity, with adjustable thresholds for alarms.

Global Connectivity: Offers WiFi and cellular versions for reliable operation anywhere.

Data Logging and Alarms: Logs environmental data and motion events with real-time alerts via calls, texts, and emails.

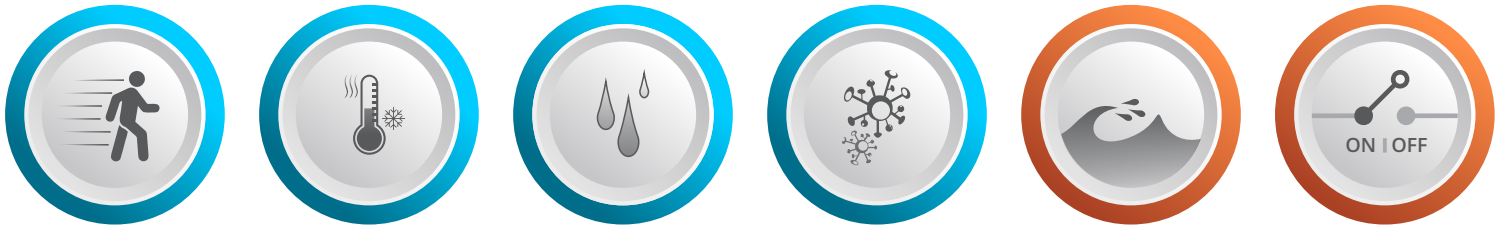
Security: Detect motion in restricted areas or facilities with instant alerts.

Remote Locations: Cellular connectivity ensures monitoring in areas without WiFi access.

BLOCK Motion combines environmental tracking with motion detection, making it essential for security, industrial, and environmental applications.

Monitoring Capabilities

Record & Send Alarm (Internal) Record & Send Alarm (Detachable)



Motion Detector | Ambient Temp | Relative Humidity | Mold index | Flood Detector | Digital Input

Technical Specifications

FOV (field Of View)	140°
Vision depth	Minimum 3 meters (10 ft), Up to 5 meters (16 ft)
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" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK PULSE COUNTER

Part Number: BLPULS

WiFi

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

BLOCK PULSE COUNTER

The BLOCK Pulse Counter is a versatile device designed to track cumulative values from any pulse-generating source, such as water meters, gas meters, or other utility meters. It seamlessly integrates with LoggerFlex's cloud-based application to provide comprehensive monitoring and management of utility consumption.Key Features and Benefits:

Utility Monitoring: Accurately records consumption data for water, gas, electricity, or any other resource measured via pulse generators.

Alarms for Excessive Usage: Sends real-time alerts when consumption exceeds predefined thresholds, allowing for quick corrective action.

Leakage Detection: Identifies anomalies or continuous usage patterns that may indicate leaks, helping to minimize waste and prevent costly damages.

Cost Allocation: Simplifies billing by attributing utility consumption to individual units or departments, making it ideal for residential, commercial, and industrial applications.

Energy Auditing: Offers detailed insights into usage patterns, enabling better resource management and energy efficiency.

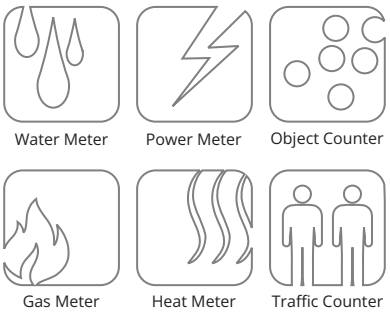
Paired with the LF Cloud App, the BLOCK Pulse Counter transforms raw consumption data into actionable intelligence, providing clear reports, trend analysis, and remote access for easy monitoring from any device. Whether for energy audits, cost management, or sustainability efforts, the BLOCK Pulse Counter is a reliable and essential tool for efficient resource management.

Monitoring Capabilities

Record & Send Alarm (Internal)

Record & Send Alarm (Detachable)

Pulse | Temperature | Relative Humidity | Flood Detector



Technical Specifications

Maximum Pulse Frequency	50 Hz
Pulse Type Compatibility	Passive
Threshold Alerts	Daily, Weekly, Monthly, Yearly, Absolute
Unit	Selectable in the application
Connector Type	2 Pins Audio Jack / 2 Poles Terminal

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK Water meter

Part Number: BLWAT3

WiFi

WiFi Water Meter

BLOCK PULSE COUNTER + WATER METER

Water Metering

Water metering provides precise measurements of water usage, enabling better management and conservation of resources. It promotes accountability by encouraging users to monitor and reduce consumption, helps detect leaks early, and supports fair billing based on actual usage.

Industries and Agriculture

In industries, metering highlights water footprints, allowing businesses to calculate water usage and costs per product type. This helps identify inefficiencies, optimize production processes, and meet sustainability goals. For agriculture, metering tracks irrigation usage, aiding in water conservation and improving crop yield efficiency. By understanding the water footprint, farmers can make data-driven decisions, reduce costs, and enhance environmental stewardship.

Water Submetering

Water submetering ensures accurate measurement of individual consumption in multi-unit properties, ensuring each tenant pays only for their usage. It fosters accountability, reduces disputes over shared bills, and identifies inefficiencies. Submetering also supports sustainability efforts by raising awareness of water usage and encouraging conservation practices among users.

Water meter type: Volumetric Piston Rotary - R160
Thread: 3/4" (nominal size 1/2")
Nominal Capacity (Q3): 3.5 m^3/h (12.8 GPM)
Max Pressure: 16 bar - Max Tem: 50°C (120°F)
Body material: ABS (No lead)
Accuracy: Nominal flow: ±2%; Transitional flow: ±5%

> "If you can not measure it, you can not improve it."

LOGGERFLEX

WiFi Data Recorder & Alarm

BLOCK ESSENTIAL PLUS

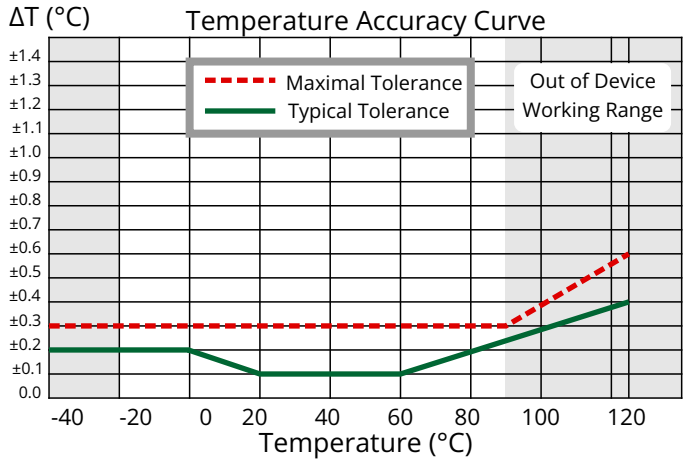
Part Number: BLESPL

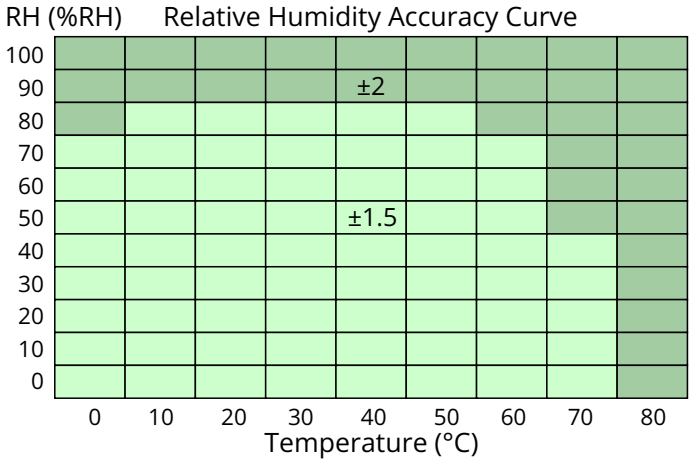
WiFi

○	PORT I	Not in Use
○	PORT II	Pulse Input (Dry Contact)
○	PORT III	Flood Detector (optional)

BLOCK Essential PLUS

The functions of the BLOCK Essential PLUS are identical to those of the BLOCK Essential but with enhanced accuracy, making it particularly suitable for environments with extreme humidity conditions, above 80% or below 20% RH. This makes it an ideal solution for applications such as post-harvest storage, where maintaining precise environmental conditions is critical, or dry cabinets in the electronics industry, which require stringent control of low humidity levels to prevent damage to sensitive components.





Record & Send Alarm (Internal)

Record & Send Alarm (Detachable)

Monitoring Capabilities

Temperature | Relative Humidity | Mold index | Flood Detector | Digital Input

WiFi Data Recorder & Alarm

BLOCK ANALOG - 4-20 mA Loop

Part Number: BLA420

WiFi

PORT I	Not in Use
PORT II	Digital Input (optional)
PORT III	4-20 mA loop analog Signal

BLOCK ANALOG - 4-20 mA Loop

The BLOCK Analog - 4-20 mA Loop is a versatile device that brings advanced monitoring, real-time alarms, and cloud data logging capabilities to any device with a 4-20 mA loop analog output. Designed for seamless integration and precision, it ensures comprehensive monitoring and actionable insights.

Key Features:

Adjustable Dimensions & Range and Sensor Disconnection Detection: Allows flexible mapping of current values to sensor-specific dimensions and ranges via the application, making it suitable for diverse applications.

Real-Time Alarms: Sends instant alerts based on mapped current values within the sensor's adjustable dimension and range, ensuring timely intervention for critical conditions.

Web Interface & Cloud Logging: Offers easy configuration and access to historical data through a web interface and cloud-based storage, ensuring remote accessibility and secure record-keeping.

With 4-20 mA analog output transducers being incredibly common across all industries, you can find sensors for virtually anything—from suspended particles to formaldehyde levels to water turbidity. By pairing these sensors with BLOCK Analog - 4-20 mA Loop, you can transform any measurement system into a powerful datalogger with real-time alarms and advanced data analysis capabilities, leveraging the robust LF Cloud platform to monitor and analyze anything you need with ease.

Monitoring Capabilities

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

4-20 mA | **Temperature** | **Relative Humidity** | **Digital Input**

Technical Specifications

Measurement Range	4 to 20 mA loop (<4 = Sensor Disconnected)
Unit and mapping Range	Defined in the application
Accuracy	±2% of full scale
Resolution	0.01
Power source for sensor	Not included

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK THERMOMAX

Part Number: BLXULT

WiFi

BLOCK THERMOMAX

The BLOCK THERMOMAX is a versatile temperature monitoring device featuring an external RTD (PT1000) sensor, designed to handle extreme temperature ranges. It supports two interchangeable probes for various applications and offers both data recording and real-time alarms for critical conditions:

Low-Temperature Probe (-55° to -200°C / -67° to -330°F): Ideal for cryogenic applications such as liquid nitrogen storage, deep-freeze facilities, and industrial cooling systems.

High-Temperature Probe (+125° to +350°C / +257° to +662°F): Suitable for processes like food processing, kiln monitoring, and high-temperature machinery in manufacturing.

With its ability to record data for analysis and send real-time alarms when temperatures exceed set thresholds, the BLOCK THERMOMAX ensures timely intervention and enhances operational reliability. Although not waterproof, it is a dependable solution for demanding industrial, scientific, and specialized applications.

PORT I	Not in Use
PORT II	Digital Input (optional)
PORT III	External Analog Temp Sensor

From Extremely Cold to Extremely Hot

-55° to -200°C / -67° to -330°F

+125° to +350°C / +257° to +662°F

Monitoring Capabilities

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

Temp Probe | **Ambient Temp** | **Relative Humidity** | **Digital Input**

Technical Specifications

Low-Temperature Probe measurement range	-55° to -200°C | -67° to -330°F
High-Temperature Probe measurement range	+125° to +350°C | +257° to +662°F
Accuracy	±1.5 °C | 2.7°F
External Sensor's measurement length	1meter (3 ft)
Battery Life	6 Months

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK Differential Air (Gas) Pressure

Part Number: BLDIFP

WiFi

BLOCK Differential Air (Gas) Pressure

The BLOCK Differential Air (Gas) Pressure device is a precise and reliable solution for monitoring differential air or gas pressure within a range of 0 to 4,000 Pa. It is essential for maintaining optimal conditions in diverse settings, from industrial environments to specialized spaces like cleanrooms.

Predictive Maintenance: This device plays a critical role in identifying issues such as clogged air filters, enabling proactive maintenance to prevent system failures and enhance operational efficiency. It supports maintaining negative pressure in critical environments, ensuring air quality and compliance with standards.

Depth Monitoring: With the capability to report pressure in H_2O mm, the BLOCK Differential Air (Gas) Pressure device provides accurate measurements for applications requiring water depth monitoring up to 400 mm.

Additionally, the device records data for comprehensive analysis and issues real-time alarms when pressure conditions exceed defined thresholds. This ensures timely interventions. Its versatility and precision make it an indispensable tool for effective environmental and system management.

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

Monitoring Capabilities

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

Diff. Pressure

Water Depth

Temperature

Relative Humidity

Flood Detector

Digital Input

Technical Specifications

Diff Pressure Measurement Range	0 to 4KPa (0 to 4000 pa)
Water Depth Measurement Range (H2OMM)	0 to 400 mm (0 to 15.8 inch)
Accuracy	±1% of full scale
Resolution	0.001 KPa
External Accessories	2mm D - 600 mm (2 ft.) silicon hose

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK LIGHT & TEMP

Part Number: BLTLIT

WiFi

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

BLOCK LIGHT & TEMP

The BLOCK Light & Temp is an advanced data logger designed to monitor, record, and analyze light intensity and temperature. In addition to sending real-time alarms for high or low light intensity, it offers powerful reporting capabilities, including cumulative light exposure over specified intervals. It also calculates UV power in milliwatts (mW) based on the selected light source and generates detailed UV exposure reports, making it an indispensable tool for managing light-sensitive environments.

Key Use Cases:

Museums and Galleries: Protect delicate artworks and artifacts by monitoring light intensity and UV exposure to prevent fading or degradation. Generate detailed light and UV exposure reports to ensure compliance with preservation standards.

Agriculture: Optimize plant growth by tracking light intensity and cumulative exposure to ensure crops receive the right amount of light. Monitor UV exposure to support healthy growth and prevent plant stress.

Workplace Compliance: Ensure workplaces and educational spaces meet regulatory standards for light exposure, enhancing productivity and maintaining safety for employees and students.

The BLOCK Light & Temp combines precision monitoring, advanced reporting, and real-time alerts, offering a complete solution for managing light-sensitive environments in museums, agriculture, and beyond.

Monitoring Capabilities

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

Light intensity | Temperature | Relative Humidity | Flood Detector | Digital Input

Technical Specifications

Light intensity Measurement Range	0 to 65535 lx
Ambient Temperature Measurement Range	-20 ~ +75°C | -4 ~+167°F
Temperature Measurement Resolution	0.1
Light intensity Measurement Resolution	1

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

WiFi Data Recorder & Alarm

BLOCK INFRARED

Part Number: BLTRED

WiFi

BLOCK INFRARED

The BLOCK Infrared is a powerful contactless temperature logger designed to measure target surface temperatures using an advanced medical grade infrared sensor. It also monitors ambient temperature, making it ideal for applications requiring precise, non-contact temperature tracking.

Key Use Cases:

Rotating or Moving Objects: Monitor the temperature of machinery components like rollers, conveyor belts, or turbines without needing to stop operations.

Hazardous or Inaccessible Areas: Safely measure the temperature of equipment in high-risk environments, such as furnaces, kilns, or high-voltage installations, without direct contact.

Fragile or Sensitive Surfaces: Log the temperature of delicate materials, coatings, or electronics where contact-based sensors might cause damage.

Sanitation and Hygiene: Ideal for applications in food processing or healthcare, where avoiding physical contact prevents contamination.

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

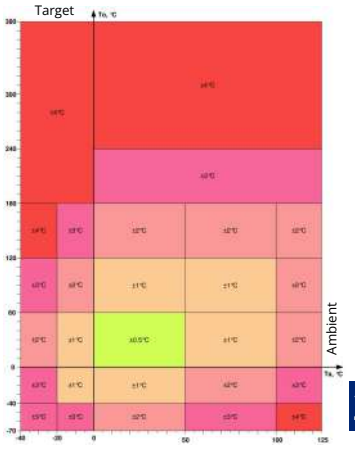
Monitoring Capabilities

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

Target Temperature | **Ambient Temp** | **Relative Humidity** | **Flood Detector** | **Digital Input**

Technical Specifications

Target Temperature Measurement Range	-70 ~ +380°C |-94 ~+716°F
Ambient Temperature Measurement Range	-20 ~ +75°C | -4 ~+167°F
Accuracy of Target Temperature	Minimum ±4°C | 7.2°F - Front Table
Accuracy of Ambient Temperature	±0.5°C | 0.9°F
FOV (Field Of View) Angle	5°



LOGGERFLEX

WiFi Data Recorder & Alarm

BLOCK BAROMETER & TEMP

Part Number: BLTBAR

WiFi

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

BLOCK BAROMETER & TEMP

BLOCK BAROMETER & TEMPThe BLOCK Barometer & Temp is a powerful device designed to measure, record, and send real-time alarms for air pressure within a range of 300 to 1100 hPa, along with temperature monitoring. With its dual functionality and reliable performance, it is an essential tool for maintaining optimal environmental conditions.

Key Use Cases:

Detecting Imbalances: Continuous logging of pressure differences between indoor and outdoor environments helps identify imbalances in HVAC systems, reducing inefficiencies and preventing potential structural damage.

Leak Detection: Identifies abnormal pressure trends that may signal air leaks in ductwork, doors, or windows, enabling early corrective action to minimize energy waste.

Optimizing Ventilation: Ensures proper air exchange rates, preventing issues like under- or over-pressurization that can lead to equipment wear or compromised indoor air quality.

Pressure-Sensitive Operations: Monitors and records pressure fluctuations that can affect manufacturing or processing environments.

Preventive Maintenance: Detects anomalies in pressure trends that may indicate HVAC system inefficiencies or potential issues.

Monitoring Capabilities

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

Air pressure | Temperature | Relative Humidity | Flood Detector | Digital Input

Technical Specifications

Atmospheric Pressure Measurement Range		300 to 1100 hPa	
Altitude equivalent Measurement Range	Meter Foot	-500 to +9000 -1640 to +29500	below/above sea level
Temperature measurement range	°C °F	-20 to +70 -4 to +160	

Refer to the BLOCK Family "General Specifications" and External sensor's dedicated pages in the catalog for more technical details.

Part Number: UNIBRG
Multi Device - No Alarm
DIN Rail Mounting

Universal Modbus Bridge

The Universal Modbus Bridge is a powerful and flexible device designed to connect Rs485, Modbus-enabled sensors or M-BUS meters and devices to our advanced web application, offering comprehensive data management, reporting, and alarm functionality.

Key Features:

RS485 Interface: Connects seamlessly to Modbus devices, supporting up to 64 devices on a single RS485 network.

Multi-model Device Compatibility in the same network: Reads multiple devices with different Modbus structures within the same network, offering unparalleled flexibility.

M-Bus Support: When paired with a M-BUS voltage level converter, it can also read M-Bus meters, broadening its utility.

WiFi and LAN Connectivity: Provides versatile networking options for reliable data

Customizable Units and Ranges: Allows users to define measurement ranges and units in the application for tailored reporting.

Data Logging and Reporting: Records all sensor data securely for detailed analysis and reporting.

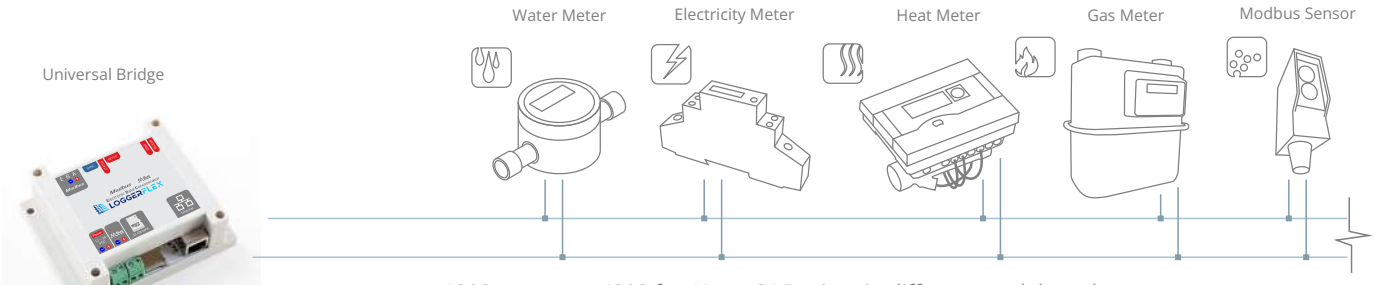
Advanced Alarm Functions: Integrates with LoggerFlex Cloud to deliver real-time alerts and trend-based notifications.

Remote Configuration: Enables receiving and updating Modbus device configurations remotely for hassle-free management.

The Universal Modbus Bridge is a comprehensive solution for managing and integrating Modbus devices into a single, powerful platform, ensuring seamless data monitoring, remote management, and actionable insights for diverse industrial applications.

Part Number: MODBUS
Single device - WiFi
With Alarm for up to
2 (Two) Parameters

Rs485 & M-bus Network diagram



1200 meters or 4000 ft. - Up to 64 Devices in different models and types

Agribun Family

The Agribun series offers cutting-edge soil monitoring solutions designed to enhance agricultural productivity and resource efficiency. With its advanced features and seamless connectivity, Agribun empowers farmers to make data-driven decisions for optimal crop performance.

Agribun Soil Moisture + Soil Temperature: This model tracks soil moisture levels alongside soil temperature, providing valuable insights to help farmers manage irrigation more efficiently. By monitoring temperature, it ensures that soil remains above freezing during planting and frost-free during harvest, extending growing seasons and maximizing crop yield and quality.

Agribun Soil Moisture + Ambient Temperature: This version pairs soil moisture monitoring with ambient temperature data, offering a broader perspective on environmental conditions. It helps farmers adjust irrigation strategies to align with changing weather, ensuring efficient water use and healthy plant growth.

Both models connect to 2.4GHz WiFi, enabling powerful features like real-time alarms for critical conditions such as water stress or temperature thresholds. While alarms are delivered instantly, data recording occurs periodically, providing a detailed log of soil and environmental parameters. This combination of real-time alerts and historical data ensures effective resource management, supports timely interventions, and promotes sustainable farming practices. With Agribun, farmers can maximize productivity while conserving water and improving crop outcomes.

Agribun Soil Moisture + Ambient Temperature

Part Number: AGBINT

Gravimetric soil moisture content &
ambient temperature monitoring
Calibrated with Black Earth soil
Waterproof (IP66) - 30 cm immersion for 10 minutes
Connectivity: 2.4 GHz Wi-Fi

Measurement Range:

Soil Moisture: 0 to 2 gr/gr Soil
Ambient Temperature: -20°C to +70°C (-4°F to +160°F)

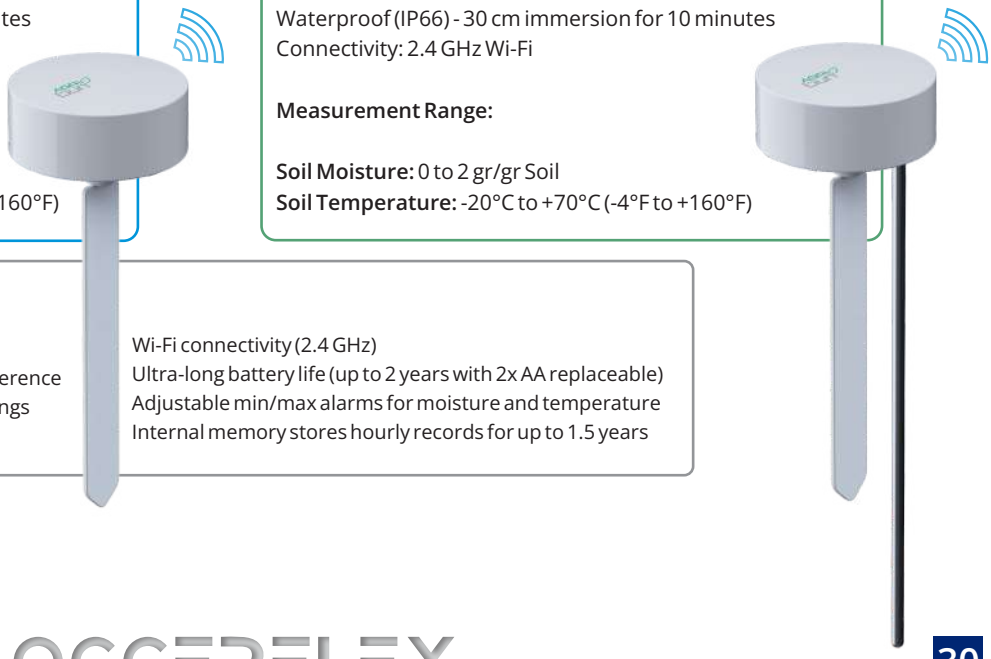
Agribun Soil Moisture + Soil Temperature

Part Number: AGBXT3

Gravimetric soil moisture content &
soil temperature monitoring
Calibrated with Black Earth soil
Waterproof (IP66) - 30 cm immersion for 10 minutes
Connectivity: 2.4 GHz Wi-Fi

Measurement Range:

Soil Moisture: 0 to 2 gr/gr Soil
Soil Temperature: -20°C to +70°C (-4°F to +160°F)



Key Features

Calibrated with "Black Earth" Soil
No soil ionization, salinity, acidity, or alkalinity interference
Temperature effect compensation for precise readings
Durable, water-resistant (IP66) design

Wi-Fi connectivity (2.4 GHz)
Ultra-long battery life (up to 2 years with 2x AA replaceable)
Adjustable min/max alarms for moisture and temperature
Internal memory stores hourly records for up to 1.5 years

WiFi Data Recorder & Alarm

BUN FAMILY

Part Numbers: BHYGRO & BUTX15

WiFi

The Bun Family stands out with its sleek, round design, offering a unique aesthetic unlike any other data logger. These WiFi-enabled devices combine advanced functionality with ease of use, making them perfect for versatile environmental monitoring needs. Powered by 2 x AA Energizer Lithium Ultimate batteries for up to 3 years of operation, they ensure long-lasting performance and reliability.

BUN HYGRO

Part Number: BHYGRO

This model monitors temperature and relative humidity, providing precise environmental data. With real-time alarms for out-of-range conditions, it is ideal for applications like indoor climate monitoring, storage facilities, and sensitive materials preservation.

BUN THERMO X

Part Number: BUTX15

Featuring two channels for ambient and probe temperature, this model is perfect for applications requiring dual temperature tracking, such as cold storage, food safety, and industrial processes. It offers alarms for critical temperature deviations, ensuring timely action.

Both models combine innovative design, robust performance, and seamless integration with LoggerFlex Cloud, offering real-time monitoring, data logging, and detailed analytics for proactive management. The Bun Family delivers reliability and style, making it a standout choice in data logging

Technical Specifications

bun Thermo X Probe's measurement range	°C °F	-55 to +125 -67 to +257
Ambient Temp measurement range	°C °F	-20 to +70 -4 to +160
Temperature reporting resolution		0.1
bun Thermo X probe Length		1.5 meters (5 ft)
Power Supply		2 x AA Energizer Lithium Ultimate batteries
FCC ID		2AC7Z-ESPWROOM32
bun Hygro RH measurement range		0-99% non-condensing
Interface		Wi-Fi - IEEE 802.11 b/g/n – 2.4 GHz
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 Diameter	H (max) = 34.5 mm (1 11/32") D = 80 mm (3 5/32 ")

Accessories

3m (10 ft) Sensor Extension Cable

Part Number: AUDEX3
Sensor extension cable
for digital temperature sensors

High Temperature Probe 1.5 m (5ft.) - NOT Waterproof

Part Number: HTS15
+125 to +550°C (+257 to +1022°F)
Accuracy: ±3°C (5.4°F)

Ultra Low Temperature Probe 1.5 m (5ft.) - NOT Waterproof

Part Number: HTUL10
-200° to -55°C (-325 to -67°F)
Accuracy: ±2°C (3.6°F)

Mounting Sticker

Part Number: BUNMNT

Non-invasive nail and screw-free mounting

Door Magnet Sensor

Part Number: DMNDRY

NC dry contact with magnet
Sends Alarm when door is Open

Silicone Cover

Part Number: BLSLCO

Silicone Weather Protection
& Shock absorber for BLOCK

Flood Detector Kit

Part Number: FLDKT3

Adapter + 3 meters (10ft.) all length sensitive

Flood Sensor Extension

Part Number: FLDEX3

3 meters (10ft.)
all-length sensitive

3.5m³/h (12.8 GPM) Water Meter

Part Number: WATP35

Rotary Piston Volumetric-3/4"
(nominal size 1/2")-16 bar-50°C

Saddle-Tee

Part Number: SAD105

1" Pipe with ½" Connector
For Thermowell sensors

2 Poles Terminal Adapter

Part Number: 2PAUTA

2 pins Female Audio to terminal adapter for Pulse & Dry contact

3 Poles Terminal Adapter

Part Number: 3PAUTA

3 pins Female Audio to terminal adapter for MODBUS interface

Predictive Maintenance

A Pro-Active Approach to Maintenance

Less Maintenance Cost

Less Facility Downtime

Less Equipment Damage

What is “Predictive Maintenance” ?

The predictive maintenance strategy uses data collected from the actual condition of the equipment to plan the required maintenance and determine when it should be carried out. This allows necessary maintenance to be planned and executed before the system's condition worsens, preventing unplanned malfunctions. The strategy minimizes downtime and maximizes the equipment's productive life cycle. In other words, maintenance is performed neither earlier nor later than necessary.

These are most common maintenance strategies:

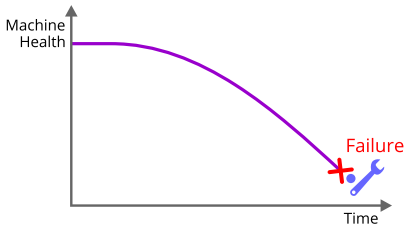
Reactive maintenance

Repairing a device only after its break down.

Maintenance Cost

$$

Low Cost
Low Importance



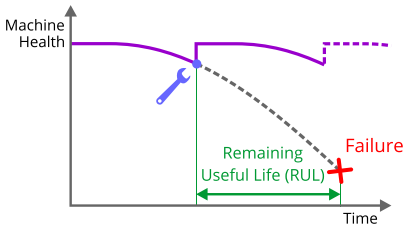
Preventive maintenance

Repairing a device before break down on schedule basis.

Maintenance Cost

$$$

High Cost
Extremely High Risk



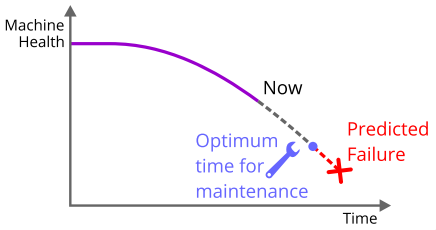
Predictive maintenance

Repairing a device before break down based on continues data collection.

Maintenance Cost

$

High/Medium Cost
High/Medium Importance



How LoggerFlex Smart Devices Can Help You?

LoggerFlex provides cost-effective and low-maintenance monitoring hardware and software solutions to facilitate "Predictive Maintenance" for equipment of any size. Whether it's a pump, electric motor, HVAC system, elevator motor, ventilation system, or tool, our plug-and-play monitoring devices enable constant measurement, recording, and monitoring of the equipment's health. They can detect anomalies or early signs of deterioration or overload, notifying the maintenance team to schedule inspections or maintenance. Enhanced by AI anomaly detection, our cloud-based application can predict potential scenarios and suggest them to the maintenance crew.

LOGGERFLEX
SMART DEVICES LTD
Data acquisition & Monitoring Solutions

Loggerflex Smart Devices Ltd.

2-3304 Cambie St., Vancouver,
BC, Canada , V5Z 2W5

Support@Loggerflex.com
www.Loggerflex.com
Toll Free: +1 (888) 365-8880
Local: +1 (604) 210-2242