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

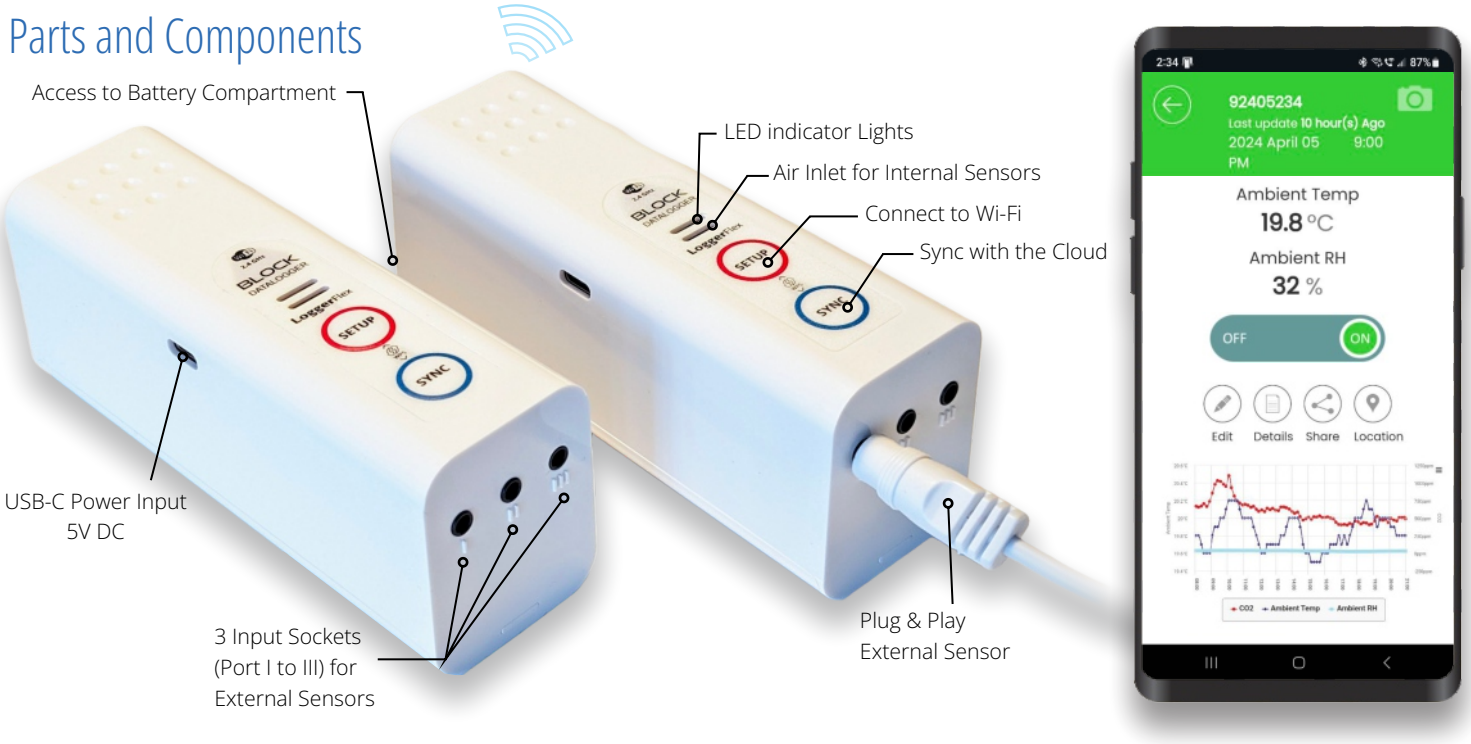
Diff Pressure Measurement Range	0 to 4KPa (0 to 4000 pa)
Water Depth Measurement Range (H2OMM)	0 to 400 mm (0 to 15.8 inch)
Accuracy	±1% of full scale
Resolution	0.001 KPa
External Accessories	2mm D - 600 mm (2 ft.) silicon hose

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

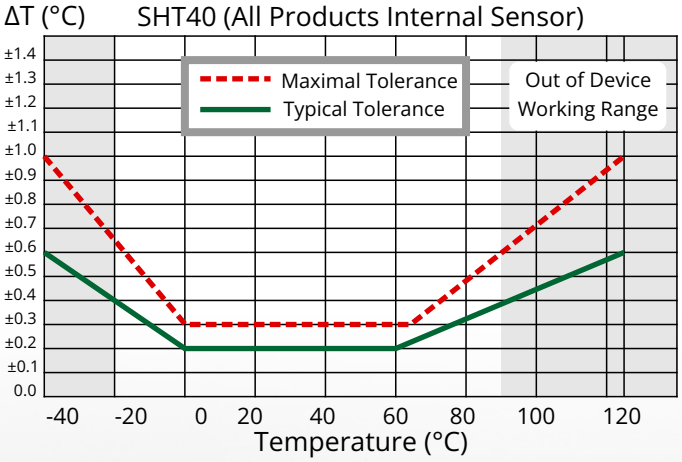
General Technical Specifications of All BLOCK Family Products

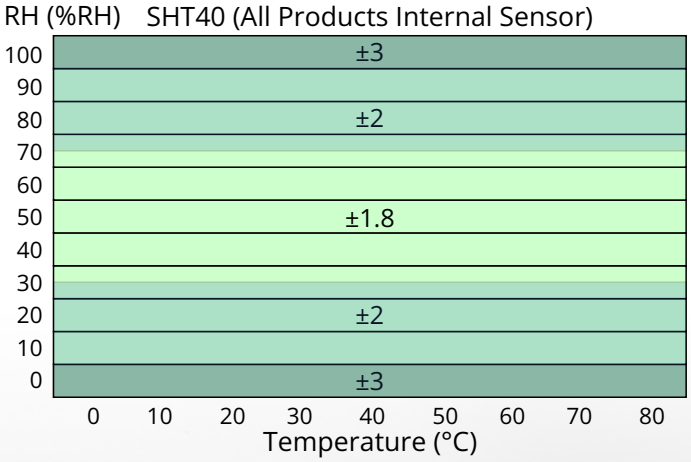
Built in sensors		Temperature and Relative Humidity (RH)
Power Supply	Internal	4 x AA batteries
	External	5V DC Standard USB-Charger
Temperature measurement range	°C	-20 to +70
	°F	-4 to +160
Temperature reporting resolution		0.1
RH measurement range		0-99% non-condensing
Interface		Wi-Fi - IEEE 802.11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

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

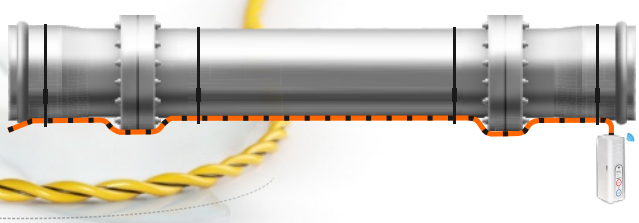
LOGGERFLEX

Flood Detector Function

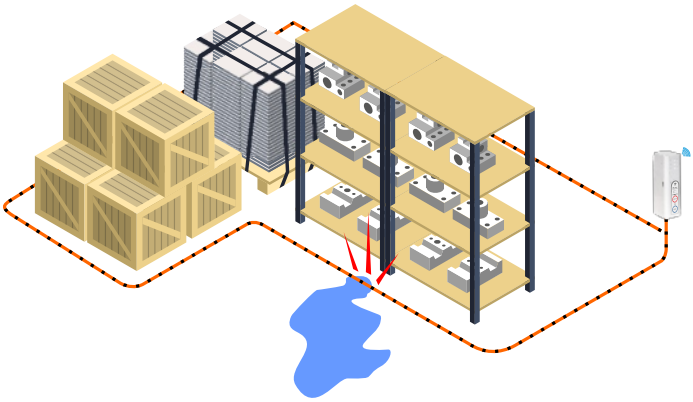
Certain members of the BLOCK Datalogger family feature a dedicated port for connecting a flood detection sensor. Our fully length-sensitive flood sensor cable can be extended up to 100 meters (330 feet), providing extensive coverage. In the event of a flood, the system not only triggers visible and audible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

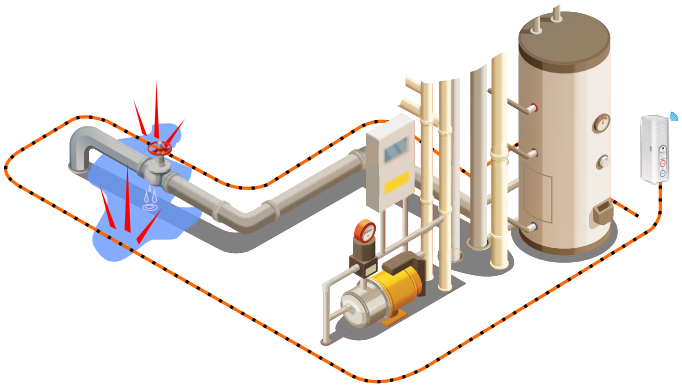
Pipe Leak Detection: Couple the detector cable along the entire length of pipes to detect and address leaks at the earliest possible moment.



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.

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