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

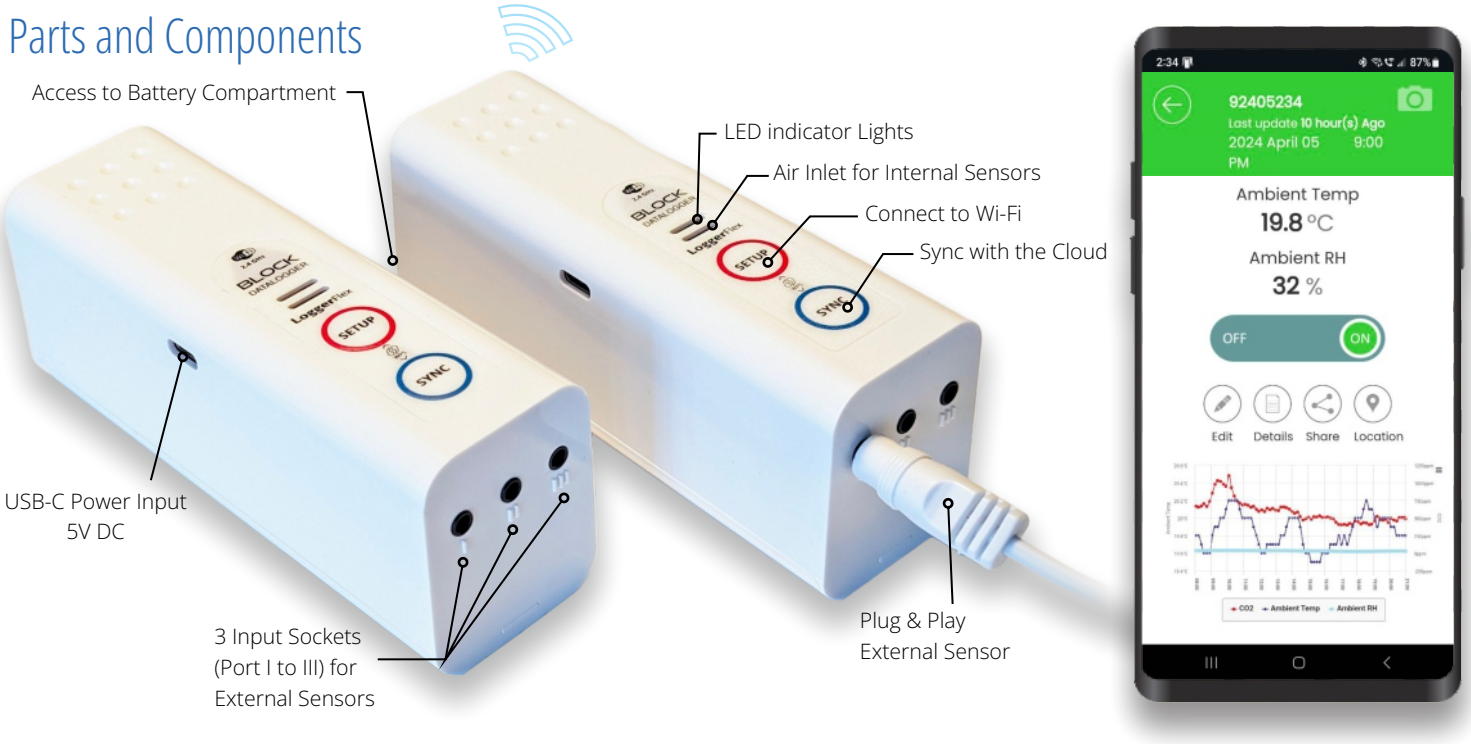
Measurement Range	4 to 20 mA loop (<4 = Sensor Disconnected)
Unit and mapping Range	Defined in the application
Accuracy	±2% of full scale
Resolution	0.01
Power source for sensor	Not included

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

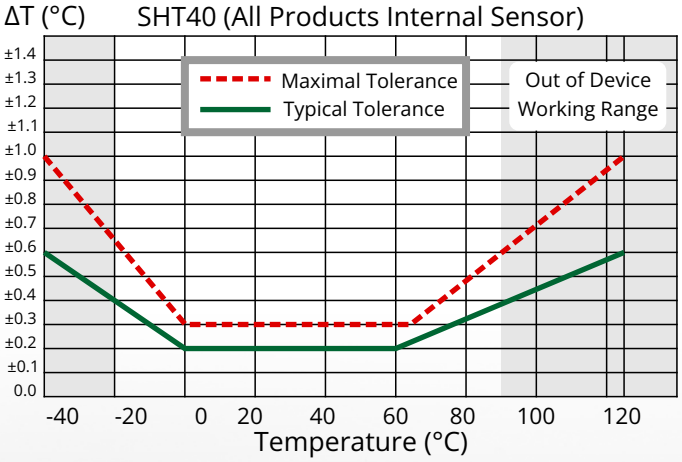
General Technical Specifications of All BLOCK Family Products

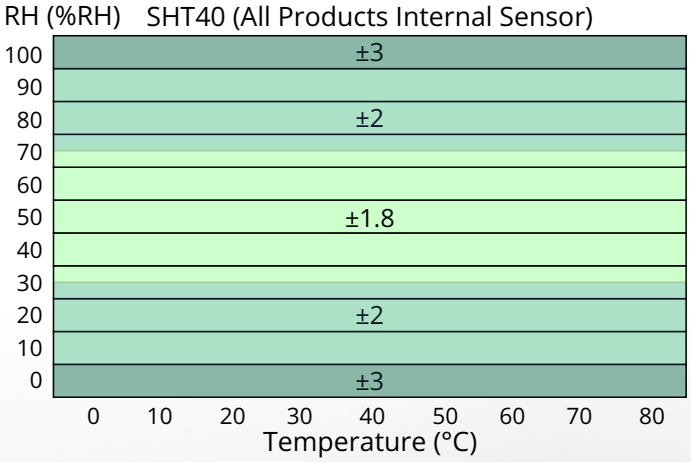
Built in sensors		Temperature and Relative Humidity (RH)
Power Supply	Internal	4 x AA batteries
	External	5V DC Standard USB-Charger
Temperature measurement range	°C	-20 to +70
	°F	-4 to +160
Temperature reporting resolution		0.1
RH measurement range		0-99% non-condensing
Interface		Wi-Fi - IEEE 802.11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

1.888.610.7664 www.calcert.com sales@calcert.com

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