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.

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

Monitoring Capabilities

⭕ Record & Send Alarm (Detachable)   ⭕ Only Recording

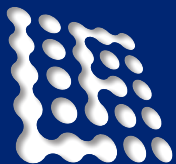**AC Current** **Temperature** **Ambient Temp** **Relative Humidity** **Digital Input**

ON | OFF

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.
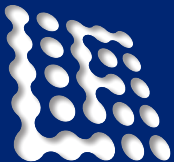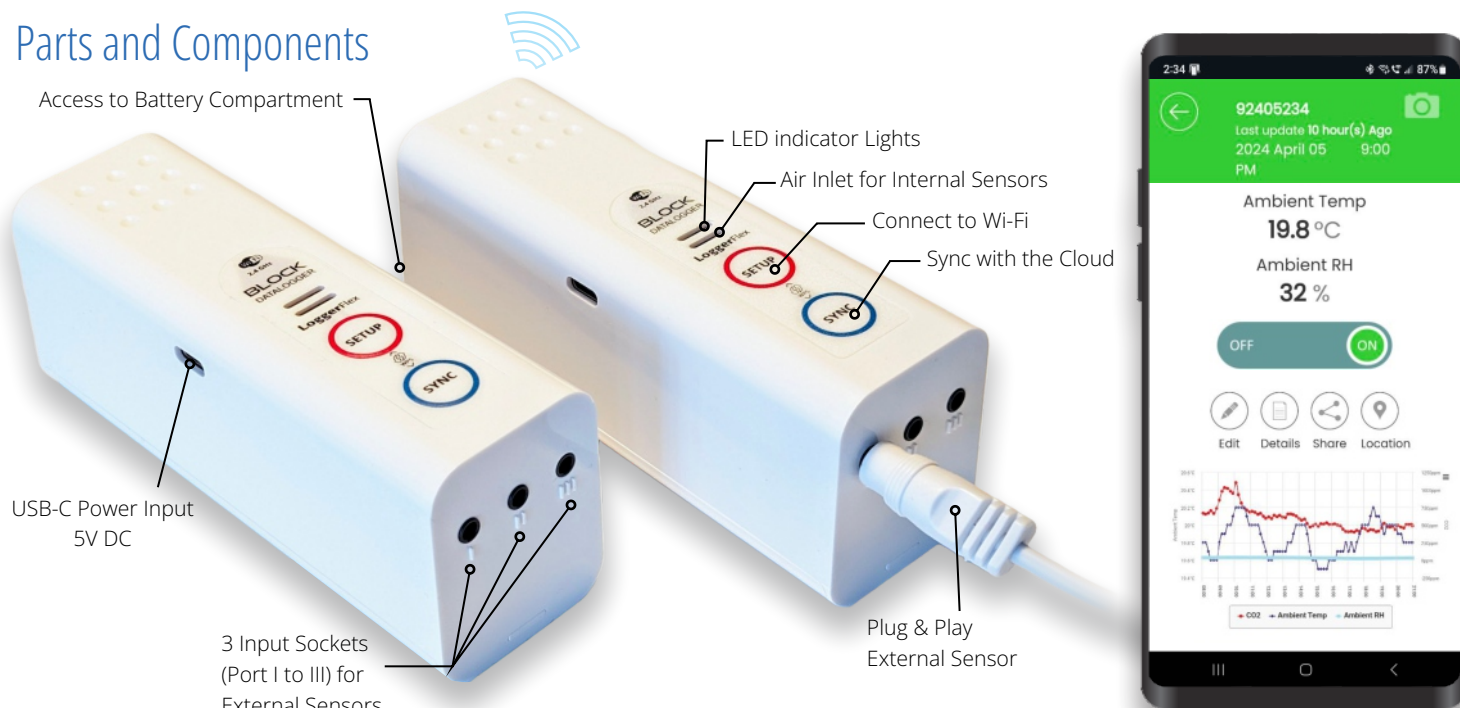
General Technical Specifications of All BLOCK Family Products

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

Access to Battery Compartment

LED indicator Lights

Air Inlet for Internal Sensors

Connect to Wi-Fi

Sync with the Cloud

USB-C Power Input
5V DC

3 Input Sockets
(Port I to III) for
External Sensors

Plug & Play
External Sensor

BLOCK DATALOGGER
Loggerflex
SETUP
SYNC

92405234
Last update 10 hour(s) Ago
2024 April 05   9:00 PM

Ambient Temp
19.8 °C

Ambient RH
32 %

OFF   ON

Edit   Details   Share   Location

CO2   Ambient Temp   Ambient RH

Internal Sensor's Accuracy
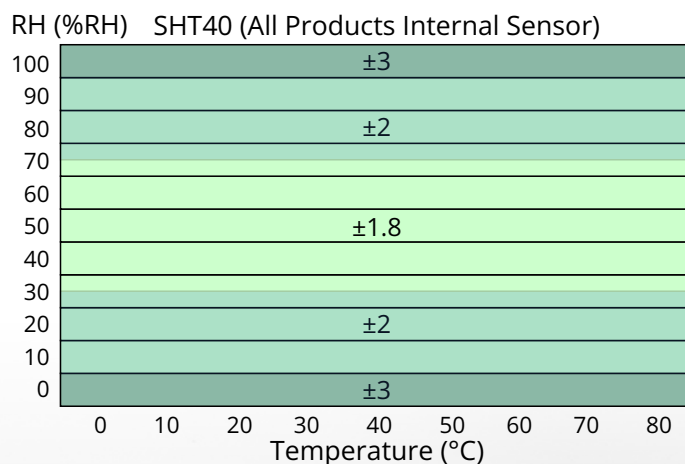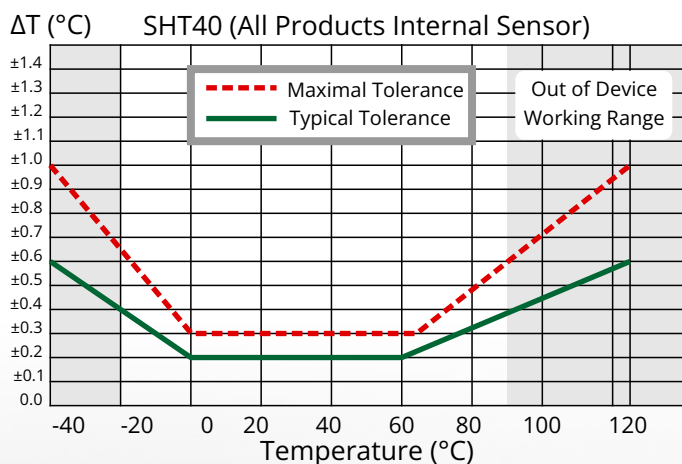
ΔT (°C)   SHT40 (All Products Internal Sensor)

- - - Maximal Tolerance
— Typical Tolerance
Out of Device Working Range

±1.4, ±1.3, ±1.2, ±1.1, ±1.0, ±0.9, ±0.8, ±0.7, ±0.6, ±0.5, ±0.4, ±0.3, ±0.2, ±0.1, 0.0

Temperature (°C): -40, -20, 0, 20, 40, 60, 80, 100, 120

RH (%RH)   SHT40 (All Products Internal Sensor)

RH (%RH)	Value
100 / 90 / 80	±3
80 / 70	±2
50 / 40	±1.8
20 / 10	±2
0	±3

Temperature (°C): 0, 10, 20, 30, 40, 50, 60, 70, 80

Compliance

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

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

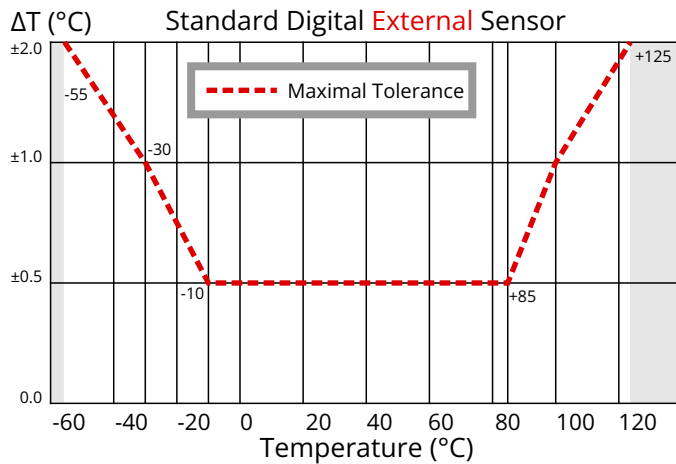Default Calibration test point at 0°C (32°F) unless indicated

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

Standard Digital External Sensor

ΔT (°C) vs Temperature (°C)

- - - Maximal Tolerance

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)

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.
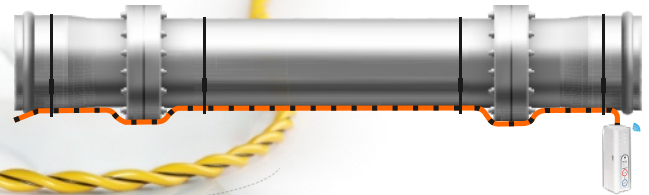
Protecting Important Assets: Secure the perimeter around valuable items by encircling them with the detector wire, ensuring immediate detection of any approaching water.
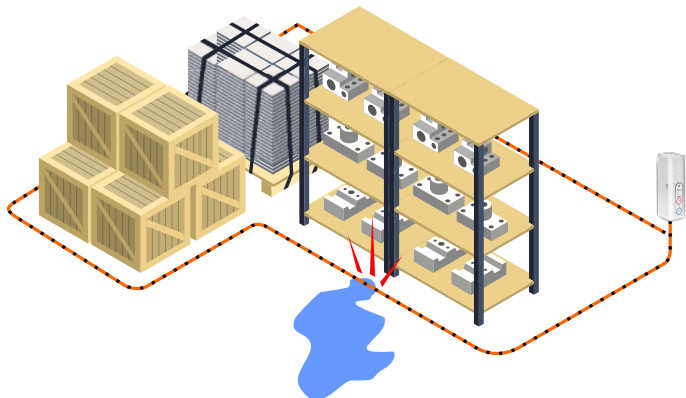
Containing the Risk Source: Surround potential risk sources with the detector cable to promptly identify and contain leaks.

Fully length-sensitive
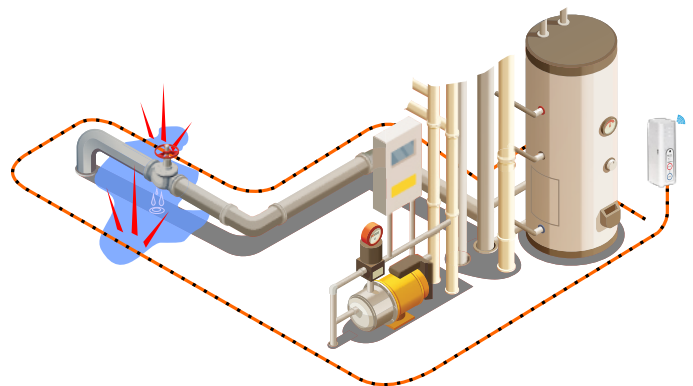
Alarm Dialer (Digital Input) Function

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.
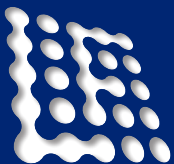
LF Cloud (LoggerFlex Online Application) is a powerful, cloud-based platform that streamlines data collection and monitoring. Its primary functions include continuous, high-resolution monitoring and 24/7 data access from anywhere, enabling remote, multi-user oversight across different time zones. The 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

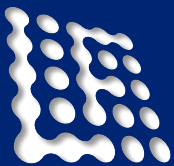## Our alarms will reach you, no matter how far you are.

Phone Call Alarm

Text Message Alarm

Email Alarm

Advance Alarm Function

1	**2**	**3**	**4**
Momentary Minimum & Maximum value Alarms	**Adjustable "Persistent Condition" Alarm**	**Adjustable Time-Weighted Average Long-term Alarms**	**Trend change (Drift) detection alarm**

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.

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.

"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.

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