LOGGERFLEX
Data acquisition & Monitoring Solutions



USER MANUAL

BLOCK ANALOG 4-20 mA

Learn how to register, configure, and operate your BLOCK 4-20mA current loop interface Wi-Fi data logger.

Part No. **BLA420** WiFi

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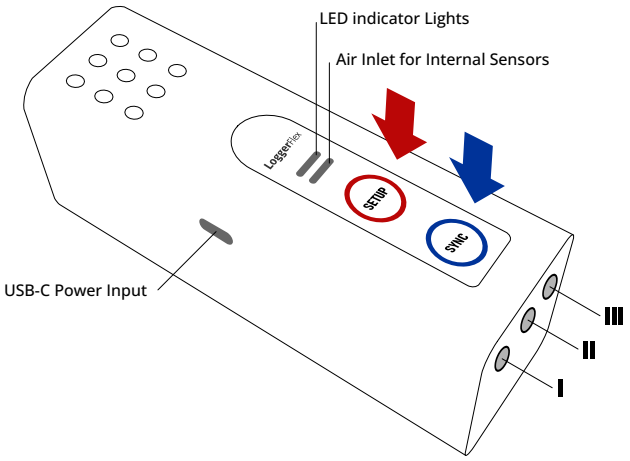
1 Device Overview

The BLOCK series features a rugged industrial housing with two physical buttons on the device: **SETUP** (top button) and **SYNC** (bottom button). By default, the device operates autonomously on 2.4GHz WiFi, uploading sensor readings to the cloud at scheduled intervals.

SETUP Button (Top). Press to activate the internal WiFi configuration hotspot for network setup.

SYNC Button (Bottom). Press to instantly trigger an environmental reading and immediately upload the latest data to your LoggerFlex Cloud dashboard.



4-20 mA Loop Terminal Adapter

INCLUDED ACCESSORY

To make it as easy as possible to connect your logger to industrial 4-20 mA output devices, each package includes a dedicated terminal adapter block. When wiring, please use the **R** and **GND** terminals (the left and right terminals). The middle terminal is not in use.

LEFT TERMINAL (R)	MIDDLE TERMINAL	RIGHT TERMINAL (GND)
Active Signal	Not in Use	Ground Connection



2 Port Specifications

Each BLOCK ANALOG 4-20 mA device is equipped with three robust external ports for standard industrial loop interface telemetry.

NOT IN USE

Port I: Not in Use

This port is not in use on the standard BLOCK ANALOG 4-20 mA model.

OPTIONAL — NOT INCLUDED

Port II: Dry Contact

Configured for dry contact digital input. Supports open/close sensors. (Optional — dry contact adapter not included.)

INCLUDED

Port III: 4-20 mA Analog Input

Interfaces with industrial sensors supplying a standard 4-20 mA current loop (e.g., pressure transmitters, level sensors, gas detectors).

3 Measured Parameters

Your BLOCK sensor is equipped with highly calibrated internal and/or external telemetry options.

Parameter	Range	Accuracy
Ambient Temp & Humidity INTERNAL Built-in ambient room temperature monitoring.	–20°C to +70°C (-4 °F to +158 °F) / 0 to 100% RH	±0.5°C (±0.9 °F) / ±3% RH
4-20 mA Analog Input EXTERNAL Interfaces with an industrial-grade transmitter to read pressure, level, or gas concentrations.	4 to 20 mA	±0.1%

4 Setup & Configuration

Follow these steps to register your BLOCK series sensor and connect it to your local wireless network.

1 1. Account Registration

Before powering the device, you must add it to your account on the web platform.

- Go to app.loggerflex.com or use the LoggerFlex Mobile App.
- Log in to your account, or sign up if you are a new user.
- Click the **+ (Add Device)** button in your dashboard.
- Enter the **Serial Number** and **DUID** code found on the label at the back of the device.

Why register first?
The system will guide you through step-by-step configuration (recording intervals, sync intervals, alarm thresholds) and ensure the device can successfully connect to the LoggerFlex cloud when it comes online.

2 2. Connect to 2.4GHz WiFi

BLOCK series sensors connect directly to your local wireless network. *Note: Only 2.4GHz networks are supported; 5GHz is not compatible.*

1. Press the **SETUP** button (top button) on your device. The device will boot its configuration portal and broadcast a temporary WiFi network named **Datalogger**.
2. Using a smartphone, tablet, or computer, connect to this temporary WiFi network.
3. A configuration page should automatically open in your browser. If it does not, open a browser and go to **8.8.8.8**.
4. Select your local WiFi SSID network from the list, input the correct password, and click **Connect**.

3 3. Cloud Synchronization

- Once connected to WiFi, the device will communicate with the LoggerFlex servers to download your configured logging settings, thresholds, and sync intervals.
- You can press the **SYNC** button (bottom button) at any time to verify the network connection and force an immediate update.
- Your sensor data is now accessible from anywhere in the world on the LF Cloud Dashboard.

5 Battery Replacement Guide

To replace the batteries, locate the round release tab on the top of the device. Press down firmly on this spot to release the back cover, then lift/slide the back cover off starting from the top to expose the battery compartment.

Standard Models (4 x AA Batteries)
The standard battery compartment holds 4 x AA batteries. You can use any high-quality alkaline batteries for reliable, long-term operation.

Older Models (2 x AA Batteries)
Some older hardware models only feature 2 battery slots instead of 4. For these 2-battery models, you **must only use Energizer Lithium Ultimate AA batteries**. Do not use standard alkaline batteries in these older models, as they will not provide sufficient power and will deplete rapidly.