



BluCloud Cloud Platform

Web Dashboard · Included With Every BluCloud Device

Every BluCloud device connects to a cloud software platform that turns raw sensor readings into actionable liquid-level intelligence. Monitor a single device or an entire fleet in real time, drill into device-level analytics, configure alerts, and manage per-device settings — all from a web dashboard, no on-site software installation required.

ACCESS

Web Dashboard

REFRESH

Real-Time

FLEET SIZE

Unlimited Devices

ALERTING

Email · SMS · Slack

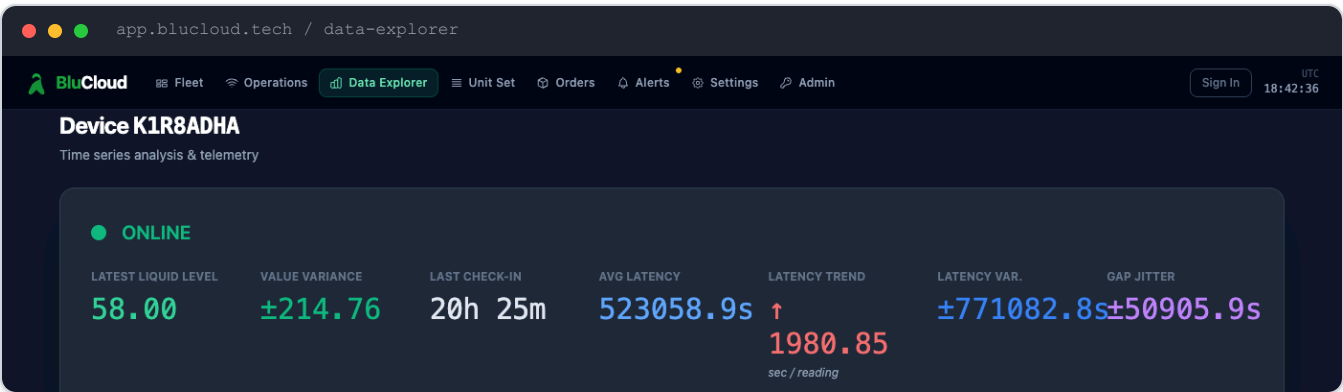
AUTOMATION

Custom Rules + Webhooks

MAPPING

3D GPS Topography

DEVICE EXPLORER — LIVE STATUS & TELEMETRY



Data Explorer: per-device status header with live liquid-level reading and connection health metrics.



PLATFORM MODULES

Fleet Organization-wide device roster and status overview. Requires account sign-in.	Operations Live cellular network operations view across the fleet — node connectivity and session data usage.
Data Explorer Deep-dive telemetry analytics for a single device: trend overlays, spectral analysis, and raw reading history.	Unit Set The full single-device analytics suite, stacked across every device in a set — for side-by-side comparison.
Orders Order and manufacturing status, tracked via a unique link provided at time of purchase.	Alerts Custom alert rules scoped to a device or the whole fleet, routed to email, SMS, Slack, or webhook — with a delivery trigger log.
Settings Per-device configuration: check-in interval, data retention, alert thresholds, and a custom formula editor for calibrating raw sensor readings.	Admin BluCloud-staff console for manufacturing and unit provisioning. Gated separately — not a customer-facing feature.

LIVE DEVICE STATUS METRICS

METRIC	DESCRIPTION
Connection status	Online / offline indicator based on most recent successful check-in
Latest reading	Most recent liquid-level value received from the device
Value variance	Statistical spread of recent readings — flags noisy or unstable sensor data
Last check-in	Time elapsed since the device last reported in
Average latency	Mean delay between a reading's measurement time and its arrival at the server
Latency trend	Direction and rate of change in reporting latency over the recent window
Latency variance	Spread of reporting latency — highlights inconsistent network conditions
Gap jitter	Variability in the interval between successive check-ins

CELLULAR & SIM VISIBILITY

app.bluccloud.tech / data-explorer

CELLULAR / SIM

Live data via Hologram

SIM LIVE Expires 29 Sep 2026

SIM STATUS	NETWORK	LAST SESSION	DATA (PERIOD)
SIM LIVE	AT&T Mobility · LTE	9.9 KB · 20h ago · 5s	250.5 KB
PLAN	PLAN EXPIRES	CELL TOWER	
Global Standard Flat Rate	29 Sep 2026	43.6150° N, 71.4920° W	

Per-device cellular health: SIM status, active carrier, data usage, plan expiration, and cell-tower location.

3D LOCATION & SITE MAPPING

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LOCATION OVERVIEW

229 Berkeley Street | 3D Topography

GPS Locked

SITE CONTEXT

TARGET COORDINATES

42.3508° N, 71.0732° W

TELEMETRY ORIGIN

Device K1R8ADHA

Interact with the map view using right-click to adjust pitch and bearing. Buildings are extruded based on local OpenStreetMap.

Interactive 3D building-extruded map (OpenStreetMap topography) plots each device's GPS-locked position alongside its configured target coordinates for drift detection. Right-click drag adjusts pitch and bearing.

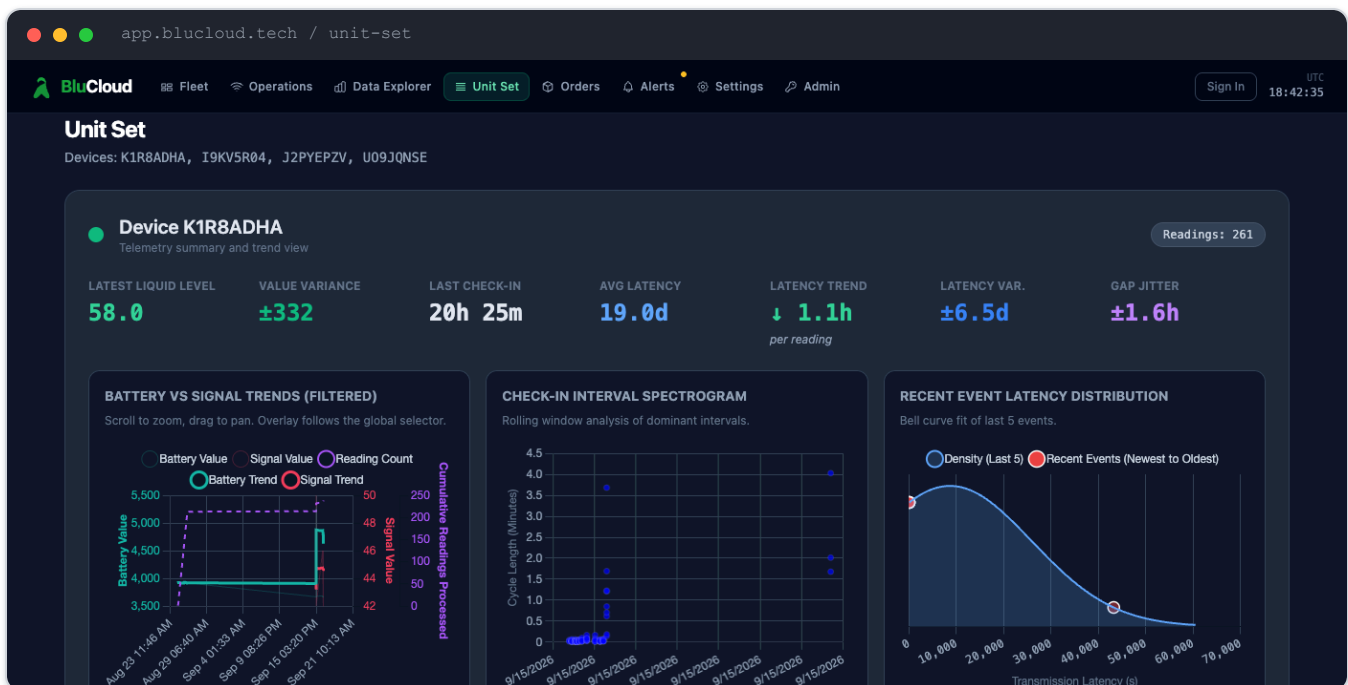
HISTORICAL TREND ANALYSIS



Battery vs. signal trend chart with selectable analysis overlays; zoom/pan supported, with independent axes for battery, signal, and cumulative reading count.

- Overlay modes: raw data, Simple Moving Average (SMA 20), Bollinger Bands (20, 2), Ichimoku Cloud, top Fourier cycle overlay
- Scroll-to-zoom and drag-to-pan across the full reading history

MULTI-DEVICE COMPARISON (UNIT SET)



A named set of devices renders the same full analytics suite shown in Data Explorer for each member, stacked in one continuous page — useful for comparing several devices at a glance.

CHECK-IN INTERVAL SPECTROGRAM



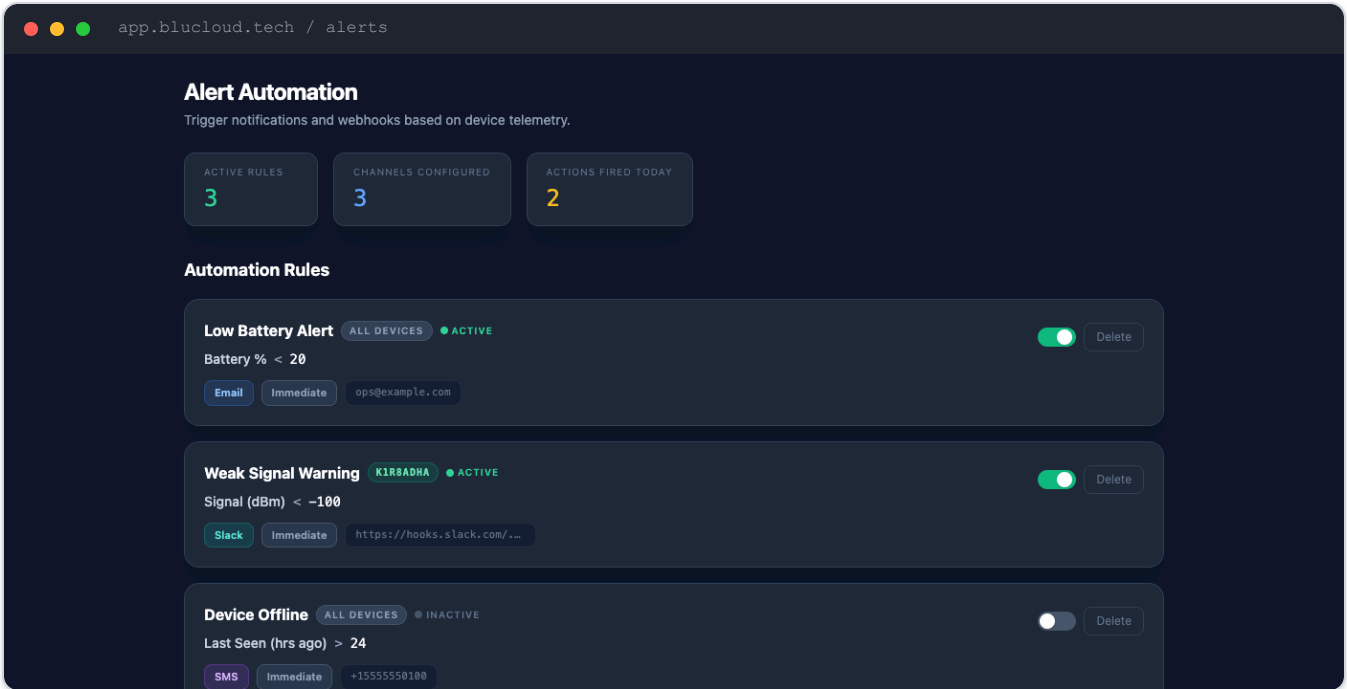
Rolling-window (STFT) analysis of dominant check-in frequencies across the full device history — surfaces drift in reporting cadence over time.

FREQUENCY DECOMPOSITION (FFT)



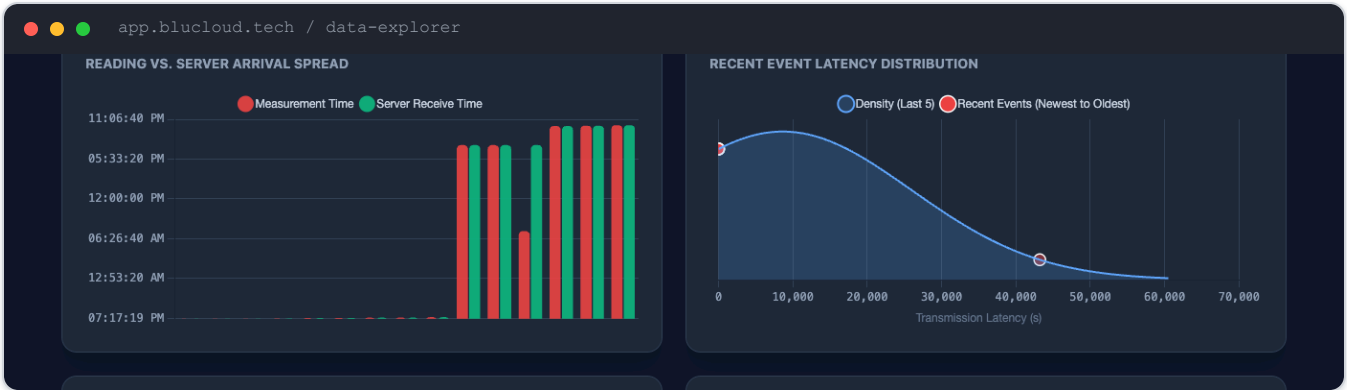
Top 5 underlying cycles isolated from transmission interval and physical reading value via FFT, each normalized around zero for pattern comparison.

ALERT AUTOMATION



Custom rules combine a metric, operator, and threshold with an action (email, SMS, Slack, or webhook) and a delivery frequency. Rules can target all devices or a single unit; a trigger log records each firing with delivery status.

LATENCY DISTRIBUTION



Measurement-to-arrival spread across recent readings, plus a density curve of recent-event transmission latency — useful for diagnosing network or buffering issues.

PER-DEVICE CONFIGURATION & CALIBRATION

app.bluccloud.tech / settings

 [Fleet](#) [Operations](#) [Data Explorer](#) [Unit Set](#) [Orders](#) [Alerts](#) [Settings](#) [Admin](#)

[Sign In](#) UTC 18:42:37

Device Settings

Configure monitoring preferences, alert thresholds, and metadata for each device.

SELECT DEVICE

K1R8ADHA — Unit Alpha

K1R8ADHA Active

IDENTITY

DISPLAY NAME

Unit Alpha

LOCATION DESCRIPTION

Site A — Roof

OWNER / TEAM

Field Ops

TAGS (comma-separated)

outdoor, critical

MONITORING

EXPECTED CHECK-IN INTERVAL

60 minutes

DATA RETENTION WINDOW

90 Days

Monitoring Enabled

ALERT THRESHOLDS

Override global defaults for this device.

BATTERY CRITICAL THRESHOLD

15 %

BATTERY WARNING THRESHOLD

30 %

SIGNAL CRITICAL THRESHOLD

-110 dBm

OFFLINE ALERT AFTER

24 hours

SENSOR & FORMULA

Define how raw device readings are interpreted and displayed.

SENSOR TYPE

Voltage / Battery

PRE-BUILT FORMULA

Voltage → Battery % (3.0–4.2V Li)

FORMULA

$$\text{clamp}(((\text{value} / 1000 - 3.0) / 1.2) * 100, 0, 100)$$

UNIT

%

TEST RAW VALUE

e.g. 3700

RESULT

— %

DISPLAY UNIT (override preset default)

%

LAST KNOWN STATUS K1R8ADHA

LAST SEEN

2h 14m ago

BATTERY

67%

SIGNAL

-89 dBm

FIRMWARE

v2.3.1

ICCID

8901260...

CHECK-INS (30D)

1,247

AVG INTERVAL

58.3 min

Read-only · Static placeholder data

Per-device identity, monitoring cadence, and alert-threshold overrides, plus a custom formula editor that maps raw sensor readings (e.g. mV) to displayed engineering units (e.g. battery %) with a live test/preview.



DATA & INTEGRATION

CAPABILITY	DETAILS
Raw reading log	Full history per device: reading ID, measurement time, value, server receive time, transit latency
Local buffering	Readings continue to be logged on-device and sync once connectivity is restored
Alerting channels	Email, SMS, Slack, and webhook — configurable per rule, with a delivery trigger log
Custom calibration	Per-device formula editor maps raw sensor values to engineering units, with live test/preview
Per-device overrides	Check-in interval, data retention window, and alert thresholds can be tuned independently per device
Multi-device sets	Group devices into a Unit Set for side-by-side comparison across the full analytics suite