BleedIO Tech — Product Status Matrix

As of: March 2026

This matrix clarifies what exists today, what is in development, and what is on the roadmap. Every claim in the data room should be traceable to a status in this document.

Product Overview

BleedIO operates a dual-product strategy:

- **locMESH** is the commercial product generating revenue today
- **netMESH** is the strategic platform in development that expands the addressable market

Both products share infrastructure (SaaS console, API layer, device management) but serve different deployment models. locMESH is centralized (gateway-dependent); netMESH is fully decentralized (no gateway required).

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locMESH — Commercial Product

Module / Feature	Status	Current Users / Pilots	Available Proof	Next Milestone	Target Timing
Real-time asset tracking	Live	Chevron, Snap-on, fire depts	Dashboard demo, Chevron deployment data	Expand to multi-site Chevron	Q2 2026
BLE device monitoring & telemetry	Live	All active pilots	1-second WebSocket stream, API access	Performance benchmarking	Q2 2026
Zone-based alerts & workflows	Live	Chevron, fire depts	Zone configuration UI, alert logs	Custom alert rules per customer	Q3 2026
Multi-tenant enterprise dashboard	Live	All customers	Web console with role-based access	Mobile companion app	Q3 2026
Occupancy & dwell-time analytics	Live	Chevron	Historical data export, heatmaps	Real-time occupancy dashboard	Q3 2026
Historical replay & CSV export	Live	All customers	Export functionality	API-based scheduled exports	Q2 2026
Fleet & device lifecycle management	Live	All customers	Device provisioning, battery tracking	OTA firmware management	Q3 2026

Module / Feature	Status	Current Users / Pilots	Available Proof	Next Milestone	Target Timing
Multi-floor coordinate system	Live	Chevron	Floor plan mapping interface	Auto-calibration	Q4 2026
REST + WebSocket APIs	Live	Integration partners	API documentation	SDK and webhook system	Q3 2026

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netMESH — Strategic Platform

Module / Feature	Status	Current Users / Pilots	Available Proof	Next Milestone	Target Timing
Decentralized mesh routing	Prototype	Internal testing	Architecture documentation, simulation results	1,000-node stress test	Q3 2026
Self-healing network (<3s reconvergence)	Prototype	Internal testing	Lab test data	Field validation at Chevron	Q4 2026
Store-and-forward offline operation	Prototype	Internal testing	Offline data sync demo	Production deployment	Q4 2026
AES-256 encryption with key rotation	Design complete	—	Security architecture document	Implementation and audit	Q3 2026
"Network in Advance" pre-provisioning	Patent pending	—	Provisional patent #63/804,380	Non-provisional filing	May 2026
Edge AI event filtering	Early development	—	Architecture specification	Gateway-level anomaly detection	Q4 2026
Hardware-agnostic firmware	Prototype	Nordic, Silicon Labs test boards	Multi-vendor compatibility testing	TI and STMicro validation	Q3 2026
RSSI-based relative positioning	Research	—	Technical specification	Proof-of-concept	Q4 2026
Beacon v1 (custom hardware)	Design	—	Hardware specification	First prototype	Q4 2026

Unified Platform Architecture — Five Pillars

Pillar	Product	Status	2026 Target	2027–2028 Target
Connectivity	netMESH	Prototype	1,000-node stress test, field validation	2,000+ nodes, <2.5s reconvergence

Pillar	Product	Status	2026 Target	2027–2028 Target
Positioning	locMESH	Live	Sub-1.5m indoor accuracy, multi-floor	Sub-1m accuracy, mobile anchors
Identity	Secure Beacons	Design	Rotating tokens, device ID	Full identity ecosystem, revocation
Edge Intelligence	On-device AI	Early development	Edge event filtering, anomaly detection	ML inference module, predictive scoring
Cloud Governance	SaaS Console	Live	Multi-tenant dashboard, OTA, analytics	AI Ops Copilot, advanced visualization

Edge AI Roadmap

Phase	Status	Capabilities	Timing
Edge AI (Now)	Early development	On-device event filtering, anomaly detection, collision risk alerts, battery degradation prediction. Sub-second decisions. No internet required.	2026
Cloud AI	Planned	Movement anomaly scoring, congestion heatmaps, asset utilization modeling, SLA drift analysis. Built on historical telemetry.	2027
AI Ops Copilot	Planned	Natural-language operator queries: "Show devices offline >15 min," "Which zone has highest congestion?"	2027–2028
Ambient Sensing	Research	Privacy-preserving presence detection using BLE radio features. No cameras. Research target — not committed.	2028+

Performance Targets

Metric	2026 Baseline	2028 Target	Industry Benchmark
Max nodes per mesh	32,767	32,767	BLE Mesh SIG specification
Reconvergence time	<3 seconds	<2 seconds	Wirepas: <5s typical
Packet loss	<1%	<0.5%	Analog Devices: >99.999% reliability
Edge latency	<100ms	<50ms	—

Metric	2026 Baseline	2028 Target	Industry Benchmark
Indoor accuracy	<1.5m	<1m	UWB: <0.3m (10x cost)
Uptime	>99.9%	>99.99%	Wirepas: 99.9% SLA

Key Distinction: locMESH vs netMESH

Dimension	locMESH (Today)	netMESH (Building)
Architecture	Centralized (gateway-managed)	Fully decentralized (no gateway)
Internet dependency	Required for cloud features	Optional — works fully offline
Single point of failure	Gateway is a dependency	No single point of failure
Revenue status	Generating MRR now	Pre-revenue / in development
Customer validation	Chevron, Snap-on, fire depts	Internal testing only
Investor story	Proves execution today	Creates valuation upside
IP protection	Copyright registered	2 patent provisionals + 8 disclosures

This matrix should be updated quarterly. "Status" labels should be taken literally — "Live" means deployed and used by external customers; "Prototype" means functional but not production-ready; "Design" means specification complete but not yet implemented; "Research" means exploratory with no production commitment.