



HARDWARE LAYER



SOFTWARE LAYER

KRITIS & NIS-2 ARCHITECTURAL RELEVANCE

Security Concept & Resilience Statement

The JUMBO BLOCK® system is designed as an integral solution for modern rainwater management. It combines physical robustness with digital sovereignty to meet the stringent requirements of critical infrastructure (KRITIS).

Note: The specific KRITIS/NIS-2 classification depends on operator role, deployment context, and national implementation.

1. Physical Resilience (Hardware)

Sabotage & Environmental Protection

The 25 cm thick concrete walls protect the integrated measurement and control technology from mechanical impact, vandalism, and extreme thermal loads.

Passive Safety

The massive block module (5 tons) provides a natural barrier against soil movement and buoyancy during heavy flood events, ensuring that sensors remain calibrated at all times.

2. Digital Integrity (Dashboard)

Data Sovereignty (Edge Computing)

As part of a NIS-2-ready architecture, primary data processing is performed locally (edge). This minimizes dependency on external cloud infrastructures and reduces the attack surface for supply chain threats.

Audit Log & Tamper Protection

Through integration with decentralized protocols (IOTA), critical water level data and alerts are provided with an immutable digital timestamp, ensuring data integrity.

Technical Compliance Matrix

Requirement	Technical Implementation	Status
Availability	Autonomous sensor power supply & offline buffering	Ready
Integrity	Integrity mechanisms (transport/protocol security & audit anchoring)	Ready
Hazard Mitigation	Alerting & escalation logic for operators (project-dependent)	Pilot (2026)



Driven by innovation: The team behind JUMBO BLOCK®.

Further Resources

Detailed specifications for our system components can be found on our project pages:

Hardware: jumboblock.app

Software: jumboblock.app/iot

Imprint / Legal Notice

JUMBO BLOCK® Dashboard Framework | As of January 2026 | This document serves as technical information and does not constitute a legal certification.