



Executive Summary: Sanction Sieve™ delivers deterministic, wire-speed sanctions and PEP screening directly inside the authorization flow of ATMs, payment terminals, and SEPA Instant rails. Holding approximately 1 million global entities entirely in memory (600 MB RAM), it resolves hits in under 0.26 ms with zero database I/O lag — complete with automated Suspicious Activity Reporting (Auto-SAR).

< 0.26 ms

P99 LATENCY
500x faster than legacy vendors

~ 1 Million

GLOBAL ENTITIES
Sanctions + PEPs in RAM

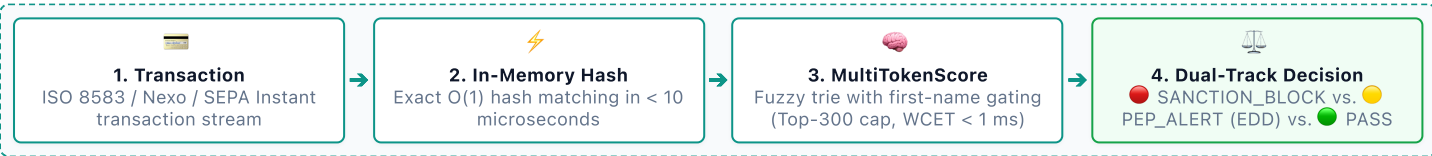
100 % WORM

AUDIT ASSURANCE
Ed25519 Merkle Tree Proof

1.62 s

RAM COLD BOOT
Full index in 600 MB memory

ARCHITECTURE INFOGRAPHIC: SUB-MILLISECOND SCREENING CASCADE



TECHNOLOGICAL COMPARISON: LEGACY VENDORS VS. SANCTION SIEVE™

Criterion	Legacy Compliance Systems	GAMPERLAB™ Sanction Sieve™
Inline Latency	80 to 150 milliseconds. Causes visible terminal timeouts and checkout drops.	0.003 to 0.26 ms (3 to 260 μs). Imperceptible at wire speed.
Execution Architecture	External cloud APIs or relational SQL disk stores (Severe I/O bottleneck).	100% In-Memory inside local payment gateway / host RAM.
Differentiation (PEP vs Sanction)	Monolithic blend. Causes embarrassing false blocks of legitimate MPs.	Strict segregation: Hard-block on sanctions; EDD alert on PEPs.
Supervisory Auditability	Batch log dumps. Subject to retroactive modification and dispute.	Mathematically immutable: Ed25519 Merkle WORM audit ledger.

Regulatory Mandate: EU Instant Payments & DORA
EU Regulation 2024/886 mandates 10-second end-to-end clearing for all instant payments. Traditional cloud screening engines break this window. Meanwhile, **DORA** prohibits uncontrolled ICT third-party reliance on foreign hyperscalers.

- Guaranteed sub-millisecond execution eliminates transaction timeouts.
- 100% sovereign deployment in European data centers (Netcup Vienna / VIX, Netcup Nuremberg, Hetzner Frankfurt) or on-prem.
- Full compliance with statutory banking secrecy and DORA mandates.

Automation: Instant EDD Dossier & Auto-SAR
Sanction Sieve™ eliminates the operational backlog suffocating compliance desks through complete workflow automation:

- Instant PEP Dossier:** Delivers tenure, party, and relatives (RCAs) in 1 ms.
- Auto-SAR Engine:** Local SLM drafts complete Suspicious Activity Reports to FIU standards (Review time: **30s instead of 4 hours**).
- Zero Checkout Friction:** Prevents false-positive merchant terminal drops.