

Matrikon eFlex™ SDK

Small Footprint. Big Impact.

The compact way to give small devices a trusted, standards-based voice, Matrikon eFlex bundles an OPC UA Server and Pub/Sub (UDP) into a production-ready SDK for sensors, controllers, and compact gateways.

The result? Resource-constrained hardware can share data securely, reliably, and in real time.



Plug-and-Play OT Data Transparency ————— The How

Standards You Can Trust



Native OPC UA Server, empowers devices to use a common language

Real Time When It Matters



UA Pub/Sub UDP for fast, predictable device updates

Standards-Based Security



Modern crypto (ECC) + certificate handling enhanced field security needs

Portable by Design



C++ API; refs for Linux/Windows & FreeRTOS/LwIP.

Fits Tight RAM Budgets



Profile-tuned builds that fit into 150 KB RAM

Conformance-tested



Validated to **OPC UA 1.04** (Micro Embedded + Data Access), 1.05 (2026)

Accelerate Time-to-Market ————— The Why

Ship Quality Sooner



Prebuilt OPC UA: sessions, security, subscriptions, Pub/Sub.

Effortless Interoperability



Standardize OPC UA across vendors/apps/sites.

Lower Technical Debt



Less custom protocol code to write and maintain across devices.

Real-time Ready



Predictable low latency for embedded/control.

Proven & Portable



C++ API; Linux/Windows + FreeRTOS/LwIP

Future-Ready Design

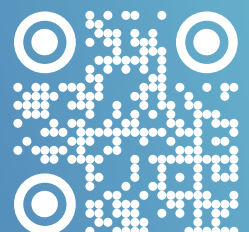


TSN/UA FX via UA Pub/Sub UDP and BE. eTSN.



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Get
Technical



www.matrikonflex.com

Matrikon Flex™ SDK

One Stack. Many Sites.

Comprehensive OPC UA Client and Server SDK for servers, gateways, and platforms on Windows, Linux, and select RTOS — multi-threaded, multi-session, DA/HA/AC, MQTT/HTTPS, and an enterprise PKI suite.

The result? Enabling your offerings with a UA implementation that is ready for use in production, office, and cloud environments. Products you can ship sooner, pass audits easier, and scale without rework.



OPC UA

Always-On OT Data Transparency ————— The How

Rich UA Profiles, Covered



Data access, history, alarms & conditions for context and auditability.

Redundancy Friendly



Built for hot/standby, failover, and multi-node continuity.

Cloud-Ready by Default



MQTT/HTTPS routes OT data into modern enterprise stacks.

Audit-Ready Security



PKI, trust lists, and TLS options that pass security reviews.

Performance at Scale



Multi-threaded and multi-client support for heavy subscription loads.

Gateway-Grade Integration



Clear APIs/callbacks for gateways, control systems, and data platforms.

Accelerate Time-to-Market ————— The Why

Faster Releases



“Server-in-a-Box” design + DA/HA/AC shortens integration and test cycles.

Confident Scale-Up



From edge gateways to multi-site with MQTT/HTTPS.

Developer Velocity



Mature APIs and reference projects cut development and debug time.

Operational Resilience



Proven in long-running systems; designed for uptime and redundancy.

Lower Total Cost



Less custom coding; makes integrations reusable.

Plant-to-Cloud Continuity

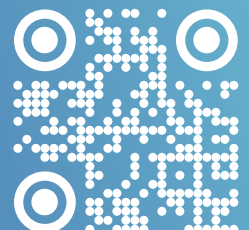


One stack for on-prem control and cloud workflows.



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