

EDGE AI SDK for Industrial IoT

AI-ready cellular modules that turn connected devices into intelligent edge nodes - without extra hardware complexity.

Telit Cinterion Edge AI SDK helps industrial IoT teams deploy predictive models directly on select 4G and 5G cellular modules, combining secure connectivity with edge intelligence for local inference, faster proofs of concept, and smarter field devices.

AI at the Edge.
Connectivity at the Core.



Overview

- **Run Edge AI directly on the module,** close to sensors, assets, and machines.
- **Deploy compatible LiteRT/TensorFlow Lite models** using proven embedded AI workflows.
- **Accelerate PoC and productization** with ready-to-run examples and fewer integration barriers.
- **Reduce BOM, footprint, and power consumption** by avoiding external AI accelerators where suitable.
- **Protect connectivity performance** while running appropriate AI workloads on embedded application cores.

The SDK integrates a lightweight LiteRT runtime into the Linux-based firmware of selected cellular module platforms. It supports the complete edge inference flow - from sensor data acquisition and pre-processing to model execution, post-processing, and delivery of predictions to the application layer.

Open by design: customers can bring compatible .tflite models instead of being tied to a proprietary workflow.

Fast to evaluate: sample applications and reference models help teams move quickly from idea to working PoC.

Optimized for embedded constraints: designed for limited RAM, flash, and CPU resources on cellular module platforms.

Engineered for reliability: tested pipelines and measured KPIs help safeguard system stability and cellular performance.

Ideal Applications

Predictive maintenance	Spot early vibration, acoustic, or visual anomalies (such as oil leaks or rust) to prevent machine failure and slow degradation.
Remote asset security	Detect relevant sounds or field events locally in remote infrastructure monitoring scenarios.
Smart metering	Interpret gauges or meters at the edge, reducing cloud traffic and manual inspection needs.
Access control	Enable low-latency face detection and analytics for secure gate activation and local security workflows.
Industrial automation	Automate real-time inline quality control, process inspection, and local logic execution across production lines.
Intelligent gateways	Combine edge inference, connectivity, and network metadata inspection to make gateways smarter, more secure, and threat-aware.

Supported Platforms

LE910C1/C4 Linux | LTE Cat 1/4 Release 10

Versatile 4G LTE modules with optional GNSS, built on a 3GPP Rel. 10 platform. They offer easy integration, built-in IP networking, and a smooth migration path across the xE910 family.

FE910C04WW | 5G RedCap + LTE Cat 4

Cost-effective and power-efficient 5G connectivity designed for industrial IoT devices requiring reliable mid-speed communications and easy migration from LTE to 5G.

FE990B40-NAD/RWD | High-Performance 5G Release 17

Advanced 5G module for industrial gateways, routers, and enterprise equipment, featuring OpenWRT Linux and powerful application processing.



FE990D60 | Next-Generation 5G Release 18

Premium 5G platform based on Qualcomm Snapdragon X85 technology, delivering maximum performance for demanding edge applications.

SE250B4 | Smart Module with LTE, Wi-Fi, BLE & GNSS

Smart module combining connectivity, multimedia processing, and edge computing capabilities in a single package (Linux variant supported).

Deploy intelligence directly on Telit Cinterion cellular modules and turn data into real-time decisions without requiring a dedicated AI processor.

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