Intelligence Gathering at the Edge



Activate. Capture. Decide – In Real Time

Intelligence, When and Where It's Needed

Modern intelligence missions are not designed for persistent, always-on collection. They are selective, time-critical, and often covert. Operators must be able to deploy sensors in advance, activate them only when needed, and extract actionable intelligence under constrained or unstable connectivity.

In these environments, persistent streaming is not just inefficient; it increases exposure and limits operational flexibility. This shift is driving a new paradigm: AI edge computing, where intelligence is generated at the source, not after the fact.

Solution Overview

Maris-Tech delivers trusted edge solutions for mission-critical operations.
Our systems enable sensors to be remotely activated, process video directly at the edge, and transmit only relevant intelligence to the operator. This capability is delivered through a portfolio of ruggedized, ready-to-deploy platforms and board-level OEM solutions, allowing flexible deployment across covert, mobile, and embedded intelligence gathering applications.

By combining on-device AI, adaptive streaming, and modular connectivity, Maris enables AI edge computing in real-world environments—delivering reliable, actionable intelligence in real time, even under constrained bandwidth and covert conditions.



Purpose-Built for Covert, Edge-Based Intelligence Operations

Remote Sensor Activation:
Activate distributed assets securely and only when intelligence is required

AI Edge Processing:
Analyze video directly on the device for immediate insights

Adaptive Data Transmission:
Maintain continuous intelligence flow under constrained or unstable networks

Metadata-Driven Streaming:
Transmit only relevant information to reduce bandwidth load

Covert, Low-Profile Deployment:
Compact, discreet systems designed for hidden operation

Modular Architecture:
Flexible deployment across a wide range of mission scenarios

Miniature Tactical Intelligence Gathering Units



Turning Data into Decision Advantage

- **Real-time access** to actionable intelligence
- **Reduced latency** through on-device processing
- **Lower bandwidth usage** and network dependency
- **Faster target detection and tracking**
- **Increased operational flexibility and responsiveness**
- **Enhanced mission effectiveness** in covert environments

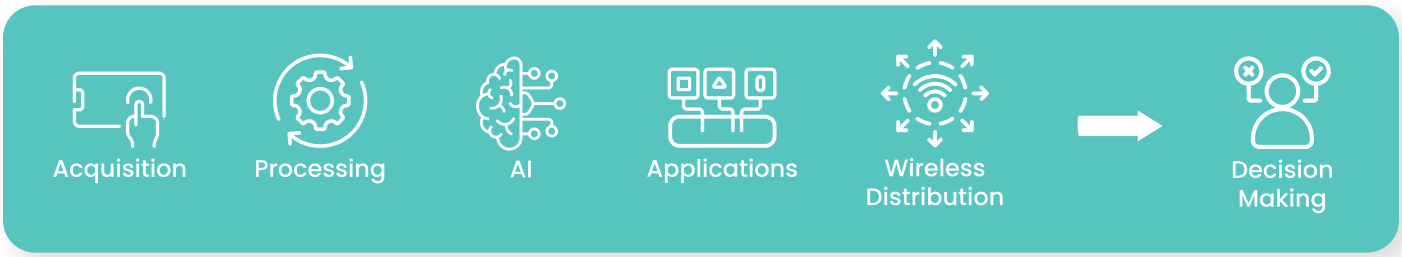


Key Features

- **AI-Accelerated Video Processing**
  Onboard H.265 encoding/decoding with integrated AI accelerator for real-time analysis
- **Multi-Input Video Support**
  Supports multiple video sources (IP, USB, digital, and analog) for flexible sensor integration
- **Adaptive Wireless Communication**
  Dynamic encoding and adaptive streaming optimized for narrowband and constrained links
- **Modular Communications Architecture**
  Expandable connectivity including LoRa, Wi-Fi, RF data link, and 5G/LTE + GPS
- **Local Recording & Secure Streaming**
  Encrypted onboard recording (microSD, eMMC) and encrypted real-time IP streaming with audio support
- **Ultra-Compact, Low-Power Design**
  Miniature form factor (~200g within enclosure, ~30g board level) with ultra-low power consumption (<5W), optimized for covert deployments
- **Rich Interface Support**
  Standard I/O including USB-C, RS-232/485, GPIO, and microphone input for rapid system integration

Mastering the Video & AI Pipeline at the Edge

Maris delivers a complete AI video pipeline at the tactical edge, purpose-built for intelligence gathering.



- **Acquisition:** Multi-sensor video and data capture (HD, thermal, infrared, RF)
- **Processing:** Compression, encoding (H.264/H.265), and optimization under bandwidth constraints
- **AI:** Onboard analytics for object detection, classification, tracking, and behavior inference
- **Applications:** Dynamic user interfaces for situational awareness, threat alerts, and control
- **Wireless distribution:** Secure, real-time streaming across narrowband or satellite networks

About Maris-Tech

Maris-Tech is a leading provider of edge AI video intelligence solutions for defense and security applications. Trusted by leading defense organizations, Maris focuses on delivering real-time situational awareness where it matters most -- at the tactical edge. We develop complete edge AI video solutions for mission-critical operations, deployed on UAVs, AFVs, tactical kits, and observation systems.

Intelligence at the Edge Anywhere, Anytime, Under Any Conditions

Situational Awareness | Intelligence Gathering | Drones | Surveillance | Terrain Dominance

Our comprehensive portfolio of video & AI-based edge computing solutions range from ruggedized, ready-to-deploy platforms to board-level components for OEM integration. All of our solutions can be tailored to your mission requirements, ensuring flexibility across land, air, sea, and space domains.
With a proven installed base and a technology foundation built for operational environments, Maris is a partner for defense organizations and systems integrators seeking to enhance intelligence collection, operational flexibility, and decision advantage at the tactical edge.