

Olzh Tech - Capabilities Deck

Executive Summary

Olzh Tech is a sovereign defense software company developing modular, mission-critical systems for drones, surveillance, and autonomous defense platforms. Founded in 2025 and headquartered in Almaty, Olzh Tech targets European and global markets with software focused on autonomy, security, and operator control.

Core Capabilities

- Autonomy Engine: Real-time pathfinding, tracking, and autonomous behavior logic
- Sensor Fusion Layer: Integrates GPS, LIDAR, and visual/thermal inputs
- Encrypted Comms: AES-256 and QUIC-style protocols for secure, low-latency messaging
- Operator Interface SDK: Front-end dashboard for fleet control, override, and simulation
- Edge Logging & AI: Offline logging, post-mission review, and lightweight on-device inference

Deployment Scenarios

- Surveillance Drone Software: Software stack for ISR drone platforms
- Border Zone Automation: Coordination and communication for autonomous patrol units
- Simulation Labs: Enables military R&D teams to test new models and tactics in synthetic environments

System Architecture (Overview)

The Olzh Stack is built with modularity in mind:

1. Control Layer – written in C++/Python, runs decision logic and sensor fusion
2. Comms Layer – secured via gRPC + TLS/QUIC
3. Operator Interface – web-based React dashboard with command/control modules
4. Storage Layer – local data logging using SQLite or custom schema

Roadmap

- 2025 – Begin internal R&D on autonomy and comms stack
- 2026 – Launch internal test environments, expand engineering team
- 2027 – Announce pilot partnerships with European defense integrators
- 2028 – Full SDK release for drone manufacturers and sovereign defense partners

Contact

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