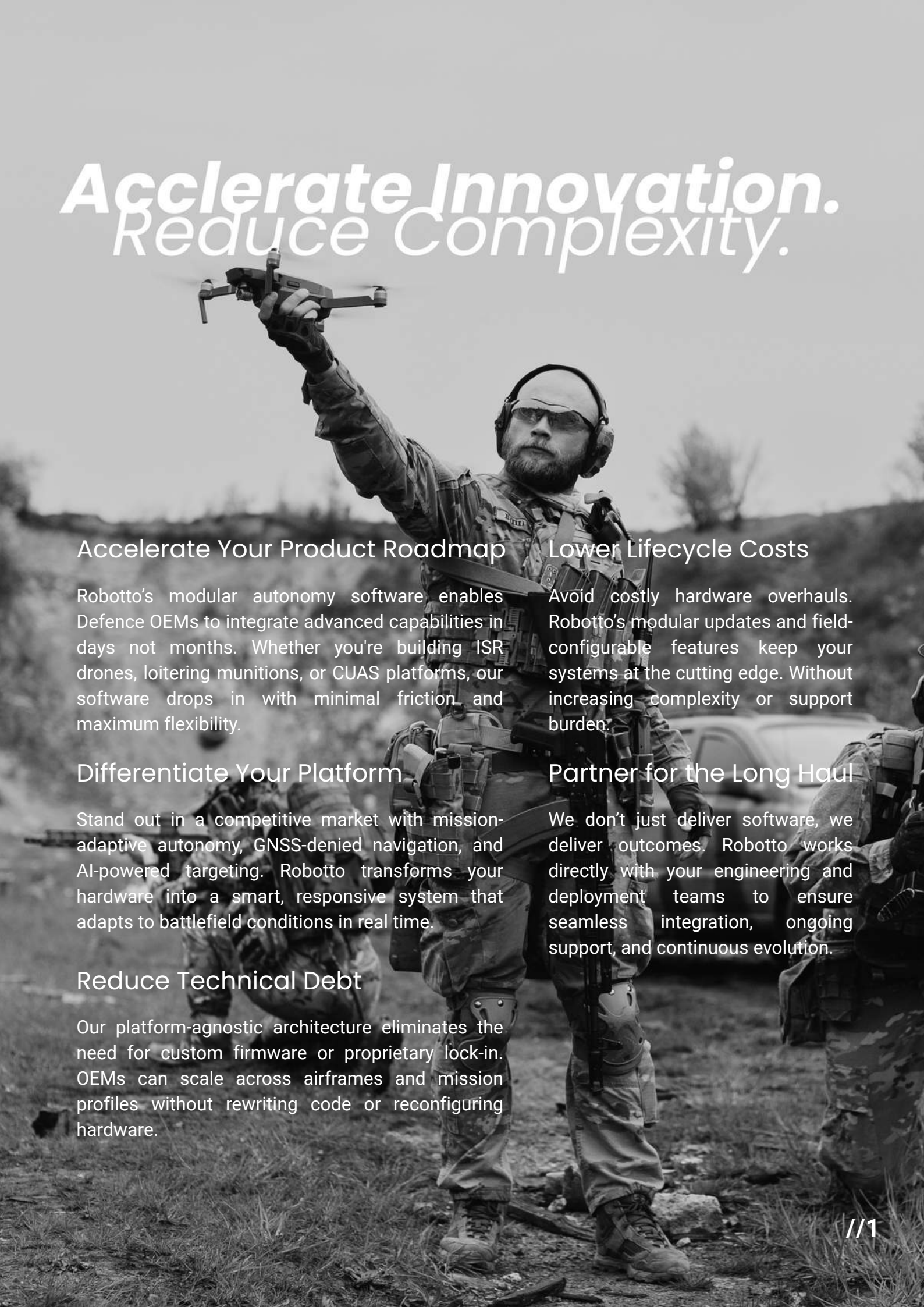
Robotto is the operating system for tactical autonomy.

Building Smarter *Platforms*

Platform-Agnostic
Mission Flexibility
Modular Architecture
Rapid Integration
GNSS-Denied Navigation
Lower Lifecycle Costs

Accelerate Innovation.
Reduce Complexity.



Accelerate Your Product Roadmap

Robotto's modular autonomy software enables Defence OEMs to integrate advanced capabilities in days not months. Whether you're building ISR drones, loitering munitions, or CUAS platforms, our software drops in with minimal friction and maximum flexibility.

Lower Lifecycle Costs

Avoid costly hardware overhauls. Robotto's modular updates and field-configurable features keep your systems at the cutting edge. Without increasing complexity or support burden.

Differentiate Your Platform

Stand out in a competitive market with mission-adaptive autonomy, GNSS-denied navigation, and AI-powered targeting. Robotto transforms your hardware into a smart, responsive system that adapts to battlefield conditions in real time.

Partner for the Long Haul

We don't just deliver software, we deliver outcomes. Robotto works directly with your engineering and deployment teams to ensure seamless integration, ongoing support, and continuous evolution.

Reduce Technical Debt

Our platform-agnostic architecture eliminates the need for custom firmware or proprietary lock-in. OEMs can scale across airframes and mission profiles without rewriting code or reconfiguring hardware.

Modularity isn’t just a feature. It’s your competitive edge.

Robotto’s software is engineered from the ground up to be mission-adaptive and integration-ready. Every capability, from perception to navigation to targeting, is delivered as a discrete module, allowing OEMs to build tailored autonomy stacks that match their platform and mission profile.

What This Means for OEMs:

Plug-and-Play Integration:
Drop in GNSS-denied navigation, autonomous loitering, or ISR capabilities without rewriting code or reconfiguring hardware.

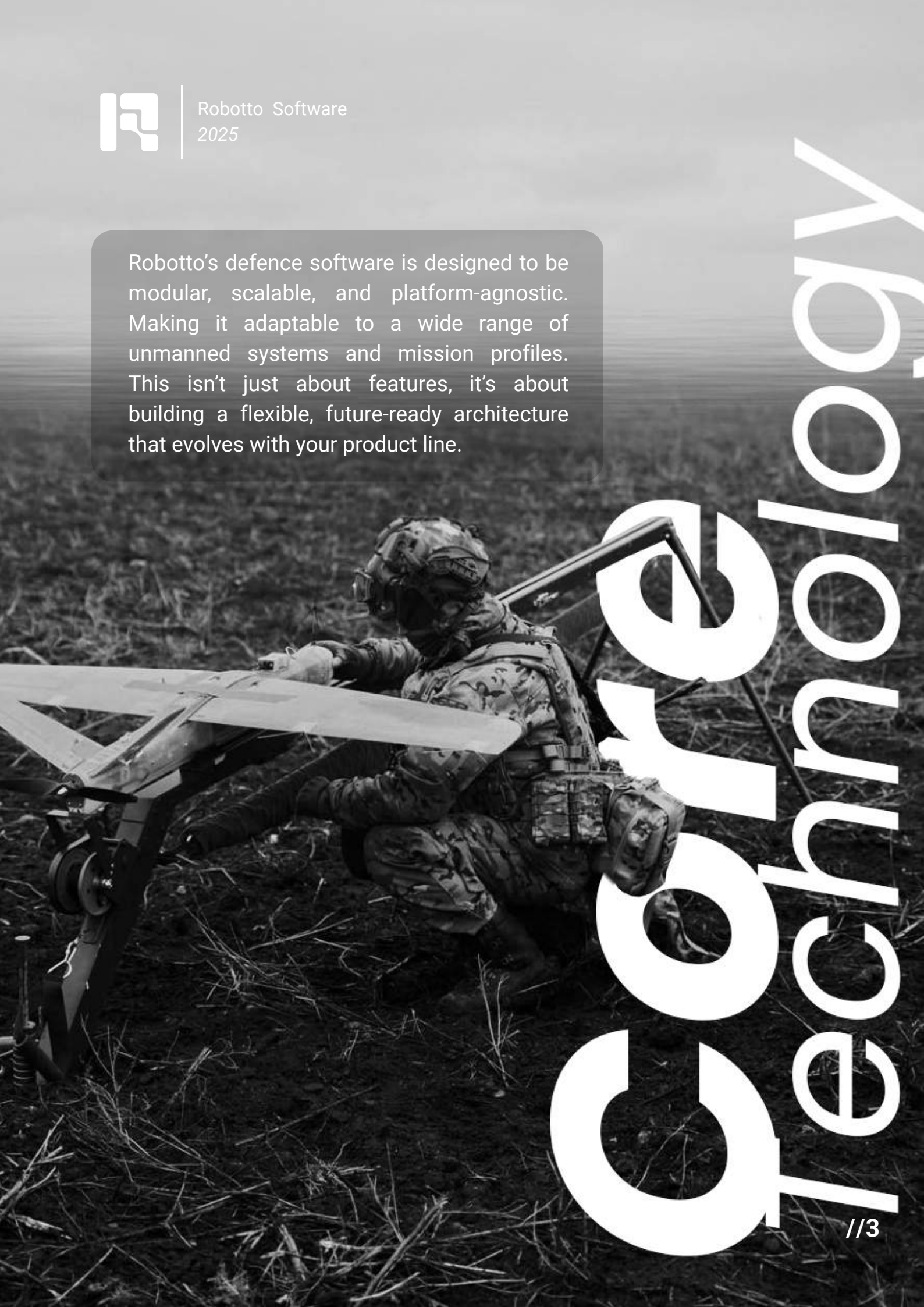
Rapid Prototyping:
Accelerate development cycles with configurable modules that adapt to evolving mission needs.

Scalable Across Platforms:
Apply the same software stack to quadcopters, fixed-wing drones, loitering munitions, or CUAS systems.

Future-Proof Design:
Add new features, swap modules, or update capabilities without waiting for hardware refreshes.

With Robotto, you don’t just integrate autonomy—you architect your tactical edge

Robotto's defence software is designed to be modular, scalable, and platform-agnostic. Making it adaptable to a wide range of unmanned systems and mission profiles. This isn't just about features, it's about building a flexible, future-ready architecture that evolves with your product line.



Core technology

Core Technology Stack: *Built for Flexibility*

Autonomous Vision-Based Navigation

Equip your robot with perception and vision-based navigation to understand and react to its environment. Providing mission autonomy under human supervision allows robots to function effectively in various settings, including urban areas and remote locations with limited signals.

Perception System

Our system allows for the search, detection, and tracking of various objects, in challenging environments. It integrates new datasets for precise searches, ensuring efficient and effective missions that adapt quickly to new challenges and objectives.

Edge Computing

Take software elements and run a system directly on hardware without relying on a direct connection to the hardware at all times. Edge Computing enables fast and accurate computation, allowing the software to make smart, analytical decisions that make every mission a success.

Intelligent Behaviour

Transform your hardware from a tool to a true team player with intelligent behaviour using Robotto's software suite. Instruct the hardware to take actions based on what it sees and understands, making smart decisions with precision.

Platform Agonistic

Robotto's software suite isn't married to one platform, meaning it can be applied to a multitude of platforms ranging from unmanned ground, aerial and underwater vehicles, ground robots and stationary cameras. The sky is the limit!

GNSS- Denied Flight

Skip the GPS and operate in remote areas even without an internet connection. Thanks to our onboard navigation system, our software runs undeterred even in heavily contested areas.

Robotto Software
2025

Built for *the Battlefield*

Robotto's software is built for the edge. Where latency matters, signals drop, and decisions can't wait. Defence OEMs need autonomy that performs under pressure, integrates fast, and evolves with mission demands. Robotto delivers exactly that.

Key Capabilities for OEM Platforms:

GNSS-Denied Navigation

Navigate confidently in jammed, spoofed, or GPS-denied environments using inertial and visual cues.

Target Re-Selection

Visually reassign targets mid-mission without resetting flight logic or grounding the drone.

Mission Safeguards

Embedded safety overlays and countermeasures reduce operator error and increase mission assurance. Even during manual flight.

Cruise Control & Stealth

Maintain autonomous flight in radio silence. Immune to jamming and spoofing, enabling persistent presence with minimal operator input.

Terminal Navigation

Precision delivery for ground-based targets in complex terrain. Ideal for loitering munitions and CUAS platforms.

Optical & Window Zoom

Enhance visibility with digital zoom and magnified targeting windows for surveillance and engagement confirmation.

Don’t take it from us

“What sets Robotto apart from other potential solutions we’ve seen or heard of is the balance between advanced functionality and real-world usability. While many systems boast impressive specs on paper, Robotto delivers where it matters most: in the field. The interface is intuitive, the performance is stable under pressure, and the features are clearly developed with end-user needs in mind, not just for demo-day slides.

Another key differentiator is your approach to collaboration. You listen, adapt quickly, and maintain a clear focus on operational efficiency. That level of responsiveness is rare and sets a strong foundation for meaningful long-term implementation.

In a sea of overengineered tools and half-baked platforms, ***Robotto manages to be both smart and practical, and that’s exactly what we need****.”*

Defence Customer, Ukraine

“What you do particularly well—and it truly stands out, is your ability to collaborate with us in a clear, organized, and refreshingly efficient way. You’re not just building a functional product, you’re making it practical, effective, and, dare we say, even enjoyable to use.”

Defence Customer, Ukraine

“Robotto is the leading product on the Ukrainian market in its category. Thanks to its high standards of quality, innovative approach to problem-solving, and reliable support, Robotto consistently delivers stable performance and effectiveness that exceeds expectations.”

Defence Customer, Ukraine

Seamless Integration

Robotto's integration model is designed to minimise friction and maximise speed. So you can get your platforms mission-ready without delays or complexity.

Step-by-Step Integration Workflow

A **Preliminary Engagement**

We begin with a short-term integration agreement. This lets OEMs evaluate performance and fit before committing, eliminating risk.

B **Hardware Receipt & Setup**

Once your drone hardware arrives, our integration team configures and tunes the system to work seamlessly with Robotto's autonomy stack.

C **Testing & Return**

We return the integrated hardware to your team for hands-on testing. You verify performance, assess mission readiness, and validate outcomes.

D **Scale at Will**

Once validated, you can deploy Robotto across your fleet. No proprietary lock-in, no firmware rewrites, just modular autonomy that scales.

OEM Benefits

- **Try Before You Buy:** Evaluate Robotto in real-world conditions before committing.
- **Fast Turnaround:** Integration completed in days, not months.
- **No Lock-In: Use your existing platforms:** No need for custom firmware or hardware.
- **Hands-On Testing:** Full transparency and control during validation.

Robotto's integration process is built for OEMs who need speed, flexibility, and confidence.

Case Study: OEM Deployment in Contested Airspace

Client: Defence OEM Partner – Ukraine
Platform: Quadcopter Loitering Munition
Mission Profile: Loitering Munitions in GNSS-denied zones

Challenge

The OEM needed to rapidly deploy a drone system capable of autonomous operations in signal-hostile environments. Traditional software stacks required extensive firmware customisation and lacked modular flexibility.

Solution

Robotto's modular autonomy stack was integrated in under one week using our short-term trial contract. The OEM leveraged:

- GNSS-denied navigation
- Cruise control with stealth mode
- Mid-flight target re-selection
- Optical zoom and object tracking

Outcome

- **99.99% target neutralisation success rate**
- **Zero mission aborts due to signal loss**
- **Full fleet upgrade completed in under 30 days**
- **Operator feedback:** "Robotto turned uncertainty into consistency—and that changes everything."

Robotto Software
2025

Turnkey Software

Turnkey Software Stack Overview

Robotto delivers more than features. We deliver outcomes. Our defence software is designed to drop into your mission profile and perform from day one. No custom builds. No long lead times. Just ready-to-deploy autonomy that works.

Whether you're clients are operate ISR missions in contested airspace, deploying loitering munitions, or executing CUAS operations, Robotto's modular stack adapts to your platform and your objectives. Each capability is field-tested, operator-informed, and built to integrate fast.

	Strike	*Spectre*	*Contra*
Hardware Compatibility	**Quadcopter**	**Fixed-Wing**	**Quadcopter/FW**
GNSS-Denied	✓	✓	✓
Autonomous Mission Safeguards	✓	--	planned
Air-to-Ground Terminal Navigation	✓	✓	*planned*
Air-to-Air Navigation	-	-	*planned*
Target Re-Selection	✓	✓	✓
Cruise Control	✓	*beta*	*planned*
Optical & Window Zoom (2X)	✓	✓	-
Static Tracking	✓	✓	-
Dynamic Tracking	*beta*	-	planned
Automatic Target Recognition	planned	planned	planned

Turnkey Software Feature Breakdown

These capabilities are designed to perform under pressure, in contested environments, and with minimal operator input. From GNSS-denied navigation to dynamic tracking and cruise control, each feature is field-tested and mission-informed to support ISR, loitering munitions, and CUAS operations.

Whether you're deploying a new fleet or upgrading existing systems, this breakdown shows how Robotto delivers autonomy that’s not just configurable—but combat-ready.

GNSS Denied

The Robotto Defence software were crafted to operate without reliance on traditional GPS navigation methods. Utilizing vision-based navigation, the software continues along the set flight path, even without a connection to the controller.

Autonomous Mission Safeguards

Often, mission success is dependent on a pilot’s ability to maintain control of the UAV throughout a mission. Drones equipped with Robotto’s defence software work with integrated mission safeguards such On Screen Display (OSD) with colour-based safety checks and operational quality of life enhancements. This prevents operators from user errors, and provides jamming & spoofing detection with counter actions, even during manual flight.

Air-to-Ground Terminal Navigation

With terminal navigation activated, the onboard computer takes command of navigation skilfully steering the system towards the target without the need for GPS. This sophisticated software automatically fine-tunes the hardware's pitch and altitude, making it a seamless and dynamic experience for loitering munition missions.

Air-to-Air Terminal Navigation

With terminal navigation activated, the onboard computer takes command of navigation skilfully steering the system towards the target without the need for GPS. This sophisticated software automatically fine-tunes the hardware's pitch and altitude, making it a seamless and dynamic experience for counter UAS missions.

Target Re-Selection

Selecting targets, even with Full HD, can be difficult. With Robotto's software, users are able to reselect targets during activated terminal guidance missions, even when cruise control is activated, altering the hardware's flight path for successful missions every time.

Cruise Control

Enable drones to operate independently of a control unit connection, allowing them to maintain flight while going radio silent. When cruise control is activated, drones can operate semi-autonomously and adjust their altitude, direction, and speed using vision-based navigation systems. Immune to all forms of jamming and spoofing.

Optical & Window Zoom (2x)

The Optical and Window Zoom system combines enhanced video quality with a 2X optical zoom to give operators a clear, Full HD view of targets and their surroundings from distances up to 2.5 KM. This allows users to confidently identify and select targets during autonomous flight, without being distracted by manual flight controls. By optimising the onboard digital camera for high-resolution video transmission, the system ensures that target selection is based on accuracy and mission needs, not just proximity or size, enabling safer, more effective operations.

Static Tracking

Choose and monitor fixed targets during terminal activation missions or when cruise control is activated. This enables autonomous navigation in GNSS-areas, guiding the mission toward a chosen static destination.

Dynamic Tracking

Lock onto moving targets for terminal navigation or long-distance ISR missions. Automatically adjust altitude, pitch and speed based on the targets speed and location.

Automatic Target Recognition

Artificial intelligence can elevate pilots' capabilities with its sophisticated assistive target recognition. By keeping a human-in-the-loop approach, this feature not only supports pilots in the intricate target selection process but also has the ability to suggest potential targets identified through AI detection.

Deployment *& Long-Term Support*

Robotto is built for rapid deployment and enduring partnership. Whether you're fielding a new drone fleet or upgrading legacy platforms, our software integrates directly by adding a small onboard computer, no long onboarding cycles.

Working With Us

What you do particularly well — and it truly stands out — is your ability to collaborate with us in a clear, organized, and refreshingly efficient way. Working with you doesn't involve endless email chains about clause 3.1.5 or chasing vague updates. Instead, it's direct, purposeful, and solution-oriented — a rare and much-appreciated approach.

Defence Customer, Ukraine

What you can expect

Fast Setup
We provide full technical documentation, integration support, and mission-specific configuration guidance. Your engineering team gets everything needed to go from install to first flight.

Operator & Engineer Collaboration
Our deployment team works directly with your operators and engineers to ensure seamless setup, tuning, and validation. We're hands-on from day one.

Modular Updates
Stay ahead of the curve with field-configurable features and modular updates. As mission needs evolve, your autonomy stack evolves with them, without any rebuilds.

Ongoing Support
From integration trials to full-scale rollouts, Robotto offers continuous support. We're here to help you scale across platforms, adapt to new mission profiles, and maintain operational readiness.

This isn't just a software drop. It's a partnership, built for the long haul.

Let’s Build Your Tactical Edge.

Robotto is ready when you are.

Whether you're:

- Exploring integration for a new drone platform
- Looking to upgrade legacy systems
- Or seeking a technical briefing to evaluate fit

Our team is here to support your next step.

What We Offer

- Live demos tailored to your mission profile
- Integration trials with no licence commitment
- Direct access to our engineering and deployment teams
- Mission-specific consultations and roadmap walkthroughs

Get in Touch

Email us at: defence@robotto.ai
Or visit: www.robotto.ai/defence

Providing industries with
leading intelligent robotics.

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