
RAVEN™
POWERED BY
RMUS GOTO
AI TECHNOLOGY
RMUS Global

The FUTURE *of* DRONES *is* AUTOMATION

Market Problem

- Rapid transformation by militaries globally to develop cheap unmanned systems based on simple FPV technology
- Current technology ”stack” to build intelligent drones is difficult to create automation and is not cost effective as each vendor needs to get their margin
- Countries need systems ASAP, but don’t have the technology to develop everything in-country

Soldiers need cost-effective drones with on-board AI to solve battlefield issues.

RMUS Solution

- Cost-Effective – In our experience selling over 10,000 drones, we understand “perceived value” and what the market will pay.
- Proprietary Components – Our Software runs on the Hardware we have developed for it
- Modular Manufacturing – Systems will be built (assembled) in any country
- Task-Specific – We can develop solutions can be developed for very specific missions
- Autonomous Operation Ready - Object Detection, Position Hold, Targeting, Following, GPS Denied Navigation
- ATAK Compatible

Raven Key Features

- ATAK Compatible
- Processor on Drone for Automated Flight
- Processor on Remote Control for Advanced Features
- Non-Jammable using Automated Flight or Fiber Optics
- Portable, Durable, IP Rating (can fly in light rain)

Raven Key Uses

- ISR
- Field Recon
- Target Locating and passing onto ATAK System
- Receiving Targets and points of interest from ATAK
- Gun Siting
- Munition Delivery:
  Strapped-on, Drop System, Integrated Warhead
- Automated
- Manual

RAVEN Versions

Based on where they operate within the jamming spectrum.

TARGETING SYSTEM

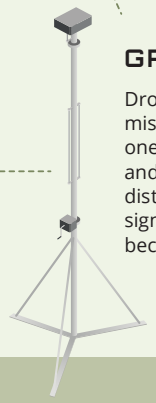
The targeting system is a smart RMUS solution built on the GO-TO smart platform—an AI-powered algorithm that enables users to carry out missions in a semi-automated manner.

POWERED BY
RMUS GO·TO™
AI TECHNOLOGY

FPV

- Goggles
- Remote Screen
- Laptop

ATAK



GROUND STATION

Drones are paired with the remote control at mission start-up. The system operates on a one-to-many relationship between the base station and multiple drones. The pilot is positioned at a safe distance from the antenna, ensuring that if the radio signal is detected by the enemy and the transmission point becomes a target, the pilot remains out of harm's way.

JAMMING SIGNAL

TARGETING

SINGLE CAMERA

Used when no jamming is present.

DUAL CAMERA

Used when jamming is present and target needs to be selected at a longer range.

ISR

GIMBALED CAMERA

Can be used for reconnaissance.
The pilot is able to move the camera during flight.

FIBER OPTICS

Can be used on targeting and ISR drones

Traditional FPV

3 Years AGO - Basic FPV
2 Years Ago - FPV with Fiber
Issue -
1 in 10 hit target with classic FPV
6 in 10 hit target with FPV Fiber
Resolution -
Targeting FPV - 9 in 10 hit target

Raven ISR

Intelligence, Surveillance and Reconnaissance

Multiple flight usage, for battlefield intel and training

- ATAK
- Drop System
- Digital Fiber Optic System
- AI Ready for advanced programming

Raven Targeting

1. **Raven Short Range Targeting** – One Time Flight with strap on munition 400 meters jamming range
2. **Raven Long Range Targeting** - One Time Flight with strap on munition 1 KM jamming range
3. **Raven Ultra Long Range Targeting** – Similar to short range but with up to 20KM of Fiber Optic Line

Target Selection

Pilot selects target by activating targeting function on remote control. Once the mode is activated the pilot uses the joystick on the remote to adjust the crosshairs.

Target Lock

Once the pilot selects the target, the drone is locked onto the object and automated flight is initiated.

Target Flight

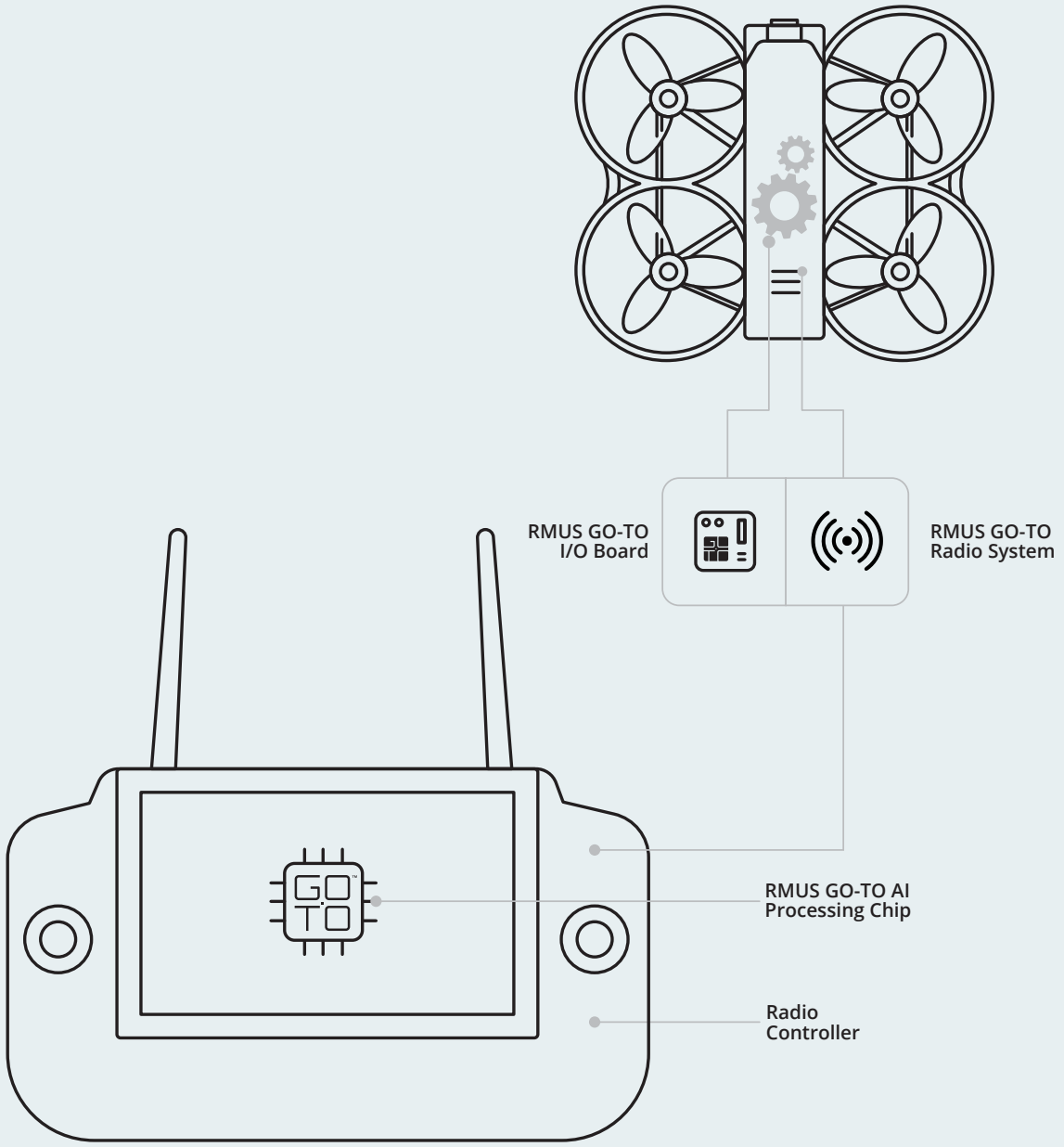
The mission is automated so at this point the drone can not effected by RF Jamming or GPS spoofing. System AI will make minor corrections in flight for ensuring target lock.

Target Impact

Pilot can watch the entire flight (if signal is not jammed).

Dual Use Technology

- Integrated Flight control Software and Hardware
  - **RMUS GO-TO I/O Board – modular interface supporting sensors, payloads, and third-party hardware integration.**
  - **RMUS GO-TO Radio System – secure, reliable communications with extended range.**
  - **RMUS GO-TO AI Processing Chip – integrated into the radio controller**
- Open-source framework with preloaded AI models and mission-specific apps.
- Flexibility to deploy custom, task-specific applications, to adapt drones to unique operational requirements without heavy R&D investment
- RMUS - Support, reputation and expertise



Introducing RMUS GO-TO™ Tech

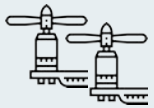
At the core of the RMUS Drone is RMUS GO-TO Technology, designed for flexibility and scalability. This technology is built around two key elements:

Hardware

- RMUS Drone – task-specific, enterprise-grade airframes.
- RMUS GO-TO I/O Board – modular interface supporting sensors, payloads, and third-party hardware integration.
- RMUS GO-TO Radio System – secure, reliable communications with extended range.
- RMUS GO-TO AI Processing Chip – integrated into the radio controller, enabling real-time onboard AI computation.

Drone Body

Propellers



Motors

RMUS GO-TO Flight Control Board

RMUS GO-TO Radio Receiver

RMUS GO-TO AI Processing Board

Batteries

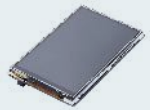
Antenna

Camera

COMPONENTS

Remote Control

RMUS GO-TO Computer Processor



LCD Screen

Buttons and Control Sticks

Antenna

RMUS GO-TO Radio Transmitter

Battery

Software

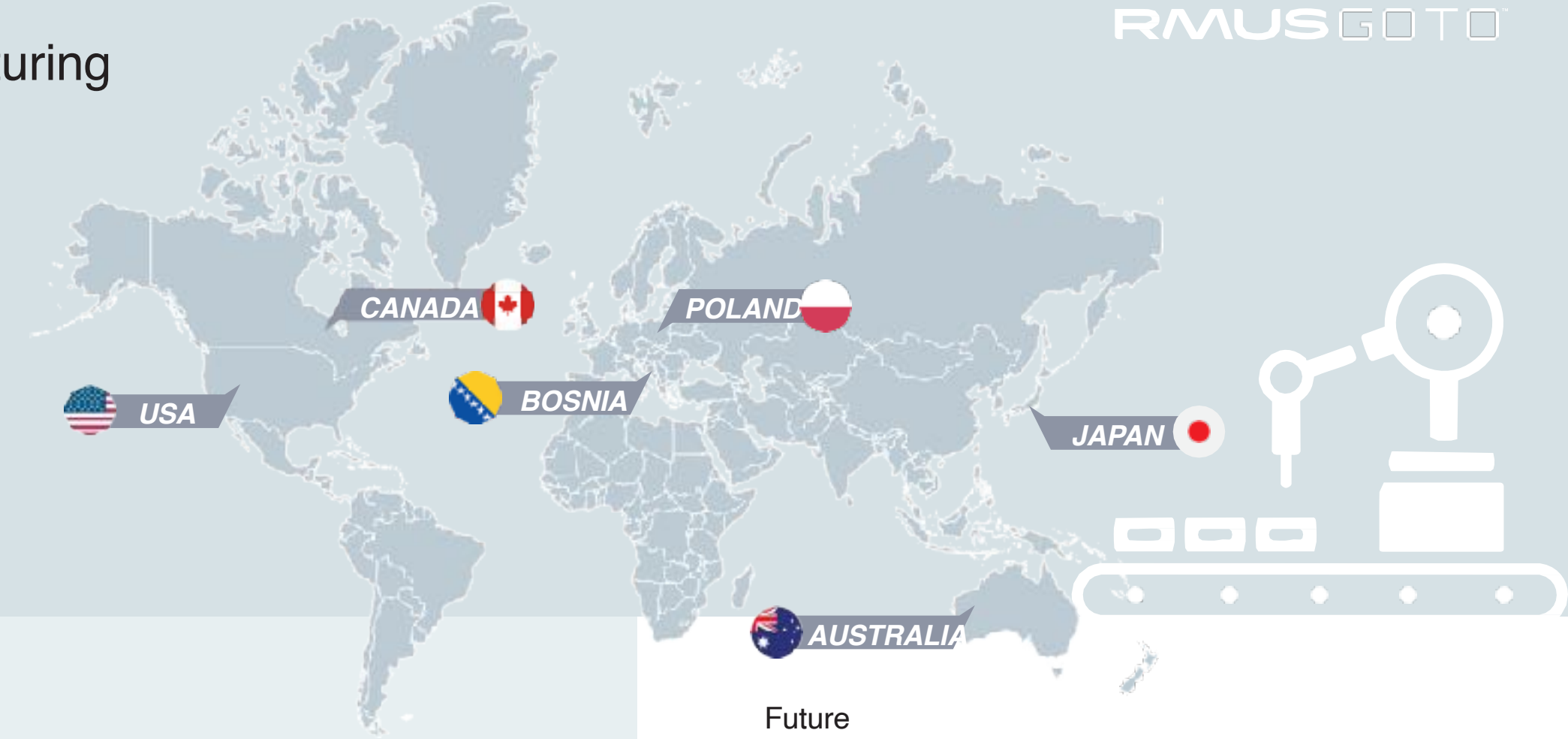
- Open-source framework with preloaded AI models and mission-specific apps.
- Flexibility to deploy custom, task-specific applications, allowing organizations to adapt drones to unique operational requirements without heavy R&D investment.

OnBoard Automated Flight

RMUS Flight Application Software

Ability to Run AI Object Detection Models

Modular Manufacturing



Process

- RMUS GO-TO AI Electronics now manufactured in Krakow, Poland.
- Electronics are shipped to RMUS locations in US, Canada and Bosnia.
- Sites will have the Raw materials, components and equipment to built systems
- RMUS GO-TO AI Software added to systems on location
- Local RMUS will train and support customers via RMUS Platform

Future

- Duplicate Electronics manufacturing in US
- Remote Sites get 3D printers and Injection Molding
- Scale production to other regions
- Create method to deploy manufacturing via shipping containers
- Continue to Work to secure supply chain from non-Chinese components

Digital Fiber Optic Business Line

Training 5 KM FPV Spool

- Weight: 714 g
- Length: 5 km
- Attenuation: 1.01dB
- Spool Diameter: 130 mm
- Spool Length: 300 mm

20 KM FPV Spool

- Weight: 1814 g
- Fiber Length: 20 km
- Attenuation: 5.42 dB
- Spool Diameter: 130 mm
- Spool Length: 390 mm

Sky end

- Wavelength 1310 nm
- Interfaces: RX/TX/AV/VCC/GND
  - RX access to the CRSFTX of the flight control
  - TX access to the CRSFRX of the flight control
  - AV access to the AV signal output port of the flight control
- Optic interface: FC
- Communication distance: 20KM/40KM/60KM
- Power supply: DC 5.5-26V (2S-6S battery)
- Power consumption: ≤ 5W
- Communication interface: MX-SH1.0mm-5P; CRSF interface / CVBS video port
- Size: 50x25x13mm

Ground side

- Wavelength 1550 nm
- Interfaces: RX/TX/AV/VCC/GND
  - RX accesses the CRSFTX of the remote control receiver
  - TX accesses the CRSFRX of the remote control receiver
  - AV outputs to the AV signal input port of the display or VTX
- Optic interface: FC
- Communication distance: 20KM/40KM/60KM
- Power supply: DC 5.5-26V (2S-6S battery)
- Power consumption: ≤ 5W
- Communication interface: MX-SH1.0mm-5P; CRSF interface / CVBS video port
- Size: 50x25x13mm