Small UAV Detect & Avoid

Low SWaP-C DAA - Radar-led sensor fusion platform

Transforming UAV safety with cutting-edge sensor fusion

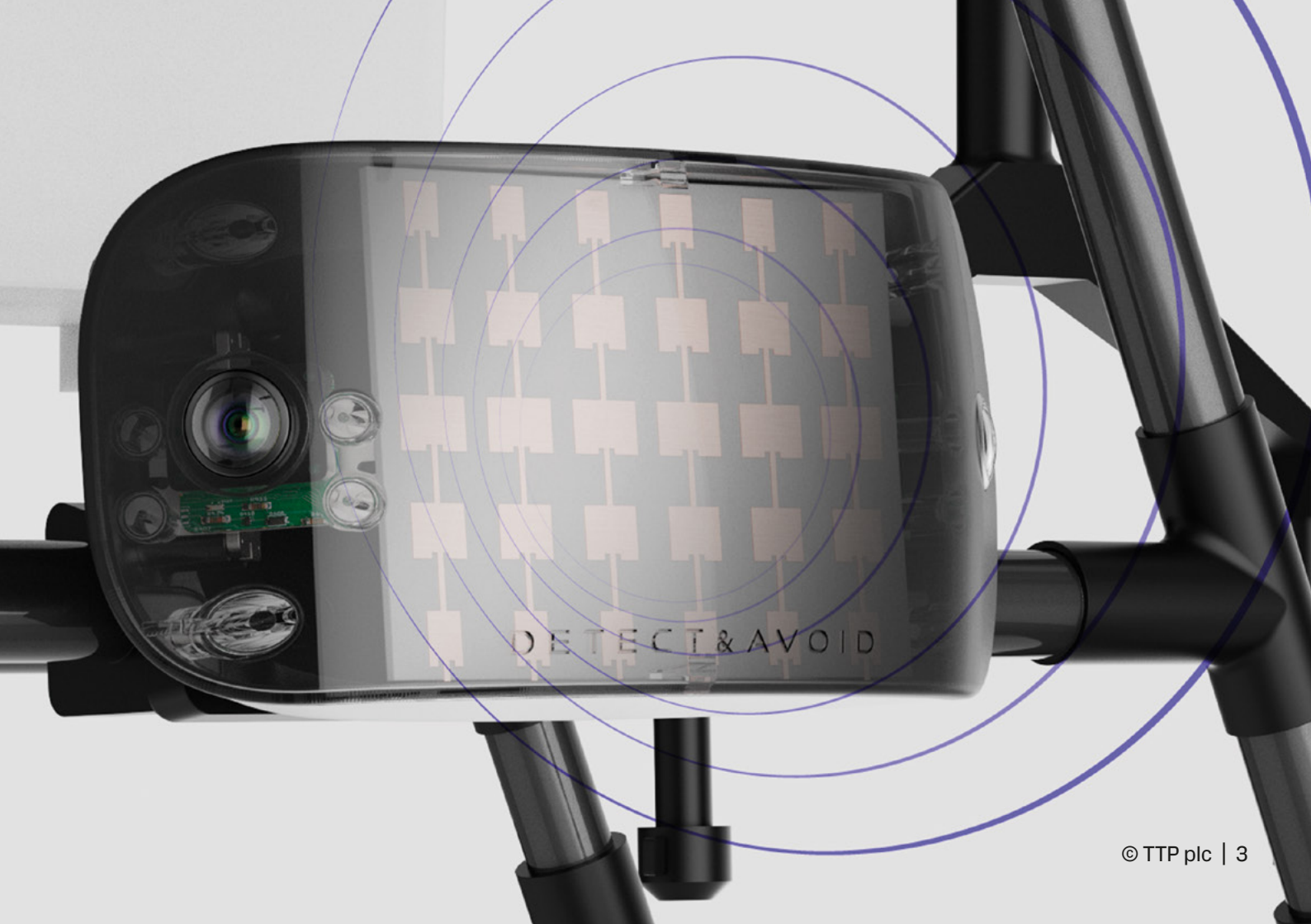
The UAV cargo sector offers huge potential growth in the next decade. However, that growth is dependent on scalable UAV safety that will allow the deployment of hundreds of thousands of vehicles.

The key to unlocking this is small form factor, low-weight detect and avoid systems that offer performance without adding huge cost.

We are poised to achieve this using radar and off-the-shelf cameras combined with advanced sensor fusion, which will meet safety standards without compromise.

To bring our technology to market, we are looking for investment partners, go-to-market collaborators, testing partners and those interested in evaluating end-to-end use case feasibility to join us in revolutionizing UAV safety.

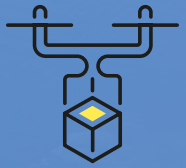
The Autonomous Team at TTP


DETECT&AVOID

Safety enablers are essential for scalable safety

Reliable command and control

Conspicuity and strategic deconfliction



Last mile tactical deconfliction

Last-mile tactical deconfliction or sense and avoid remains a tough nut to crack, because this is the last-resort activity that a human carries out today. Solutions exist but they are not scalable as they are either:

- Too power hungry
- Too heavy
- Too expensive

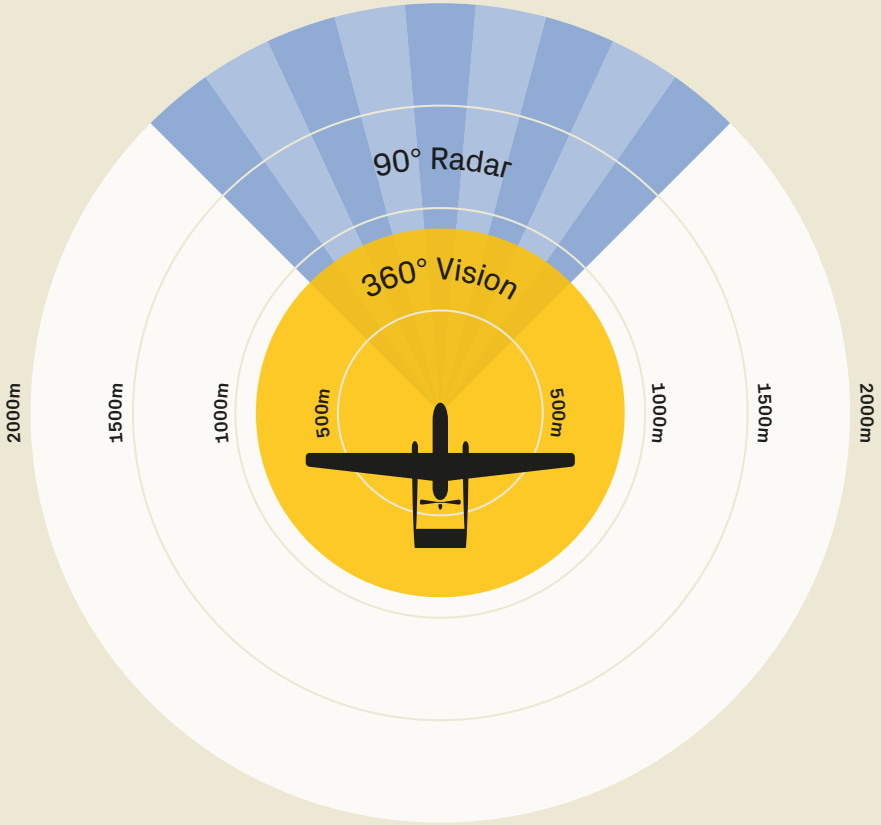
A detect and avoid solution that meets a suitable size, weight, power and cost without compromising performance can address a big gap in the UAV safety ecosystem.

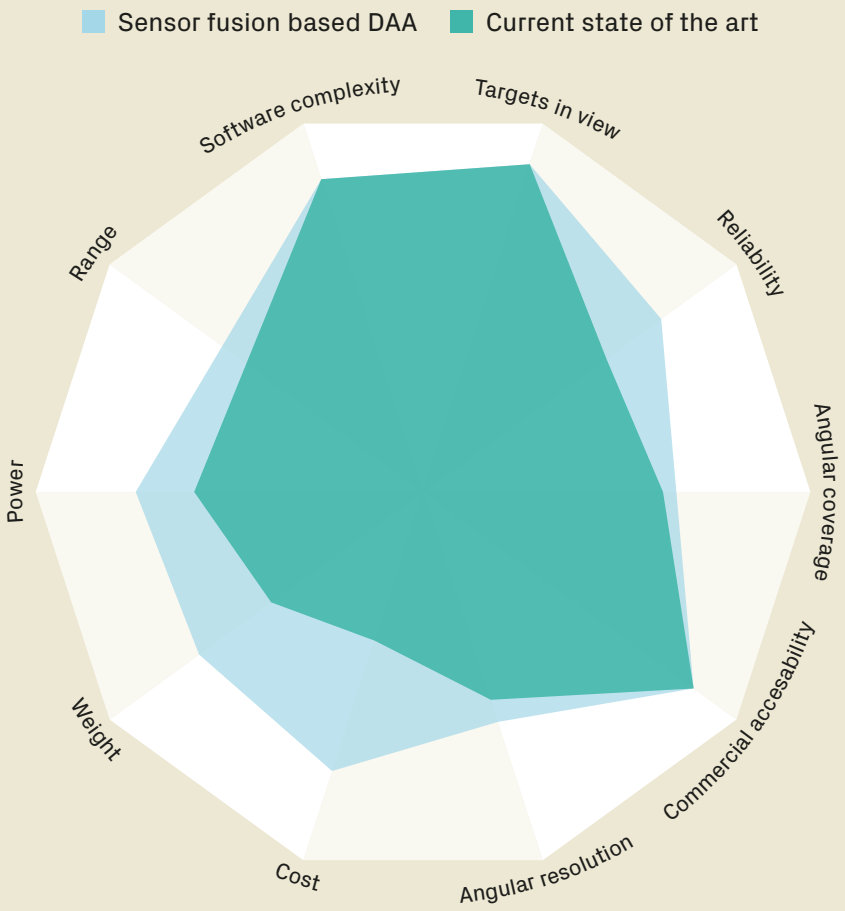
An analysis by TEAL Group suggests that the cargo market sector alone,comprising long-range rural, medium-range urban and last-mile deliveries, will require 500k vehicles from 2025-2030 (conservative estimate).

TTP believe that this a significant market opportunity (potential >$100m pa revenue in a service model).

Optimal sensor fusion system

- We are NOT trying to build an optimal radar solution.
- We are NOT trying to build an optimal camera-based solution.
- We are building an optimal sensor fusion system that uses the simplest possible radar and off-the-shelf cameras.





Our difference

- We believe we can come close to our ambitious budget of 200g, 15 W at a BoM cost of $1000.
- Achieving acceptable levels of performance (based on analysis from Transport Canada regulations).
- With added gains of redundancy in sensor modalities.

Detect-and-Avoid

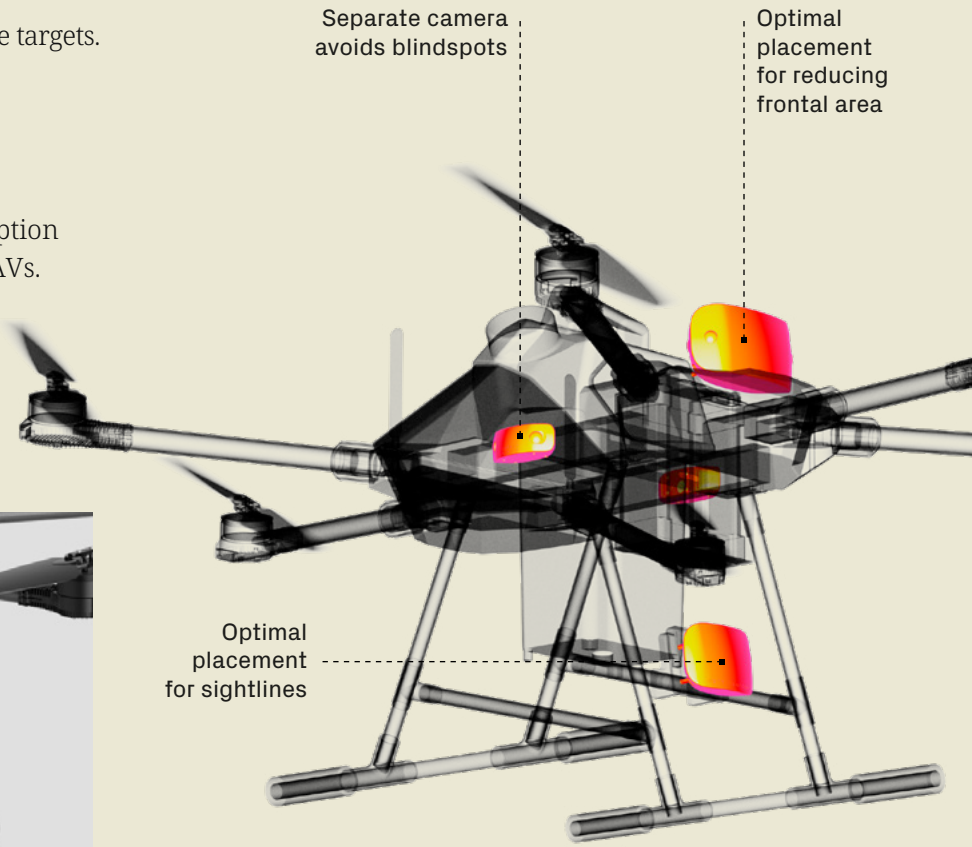
Single integrated unit offers the simplest mounting on your UAV airframe. Depending on sight lines, aerodynamics and airframe construction, separate modules are an option.

Integrated unit for small UAVs

Radar unit for MTOW UAVs

Camera units for MTOW UAVs

- Small form-factor reliable Detect-and-Avoid for non-cooperative targets.
- Brings the best of radar and vision to the drone-delivery market.
- Single form-factor integrated unit
- Separate camera modules are an option for optimal placement on larger UAVs.



Join us in our journey

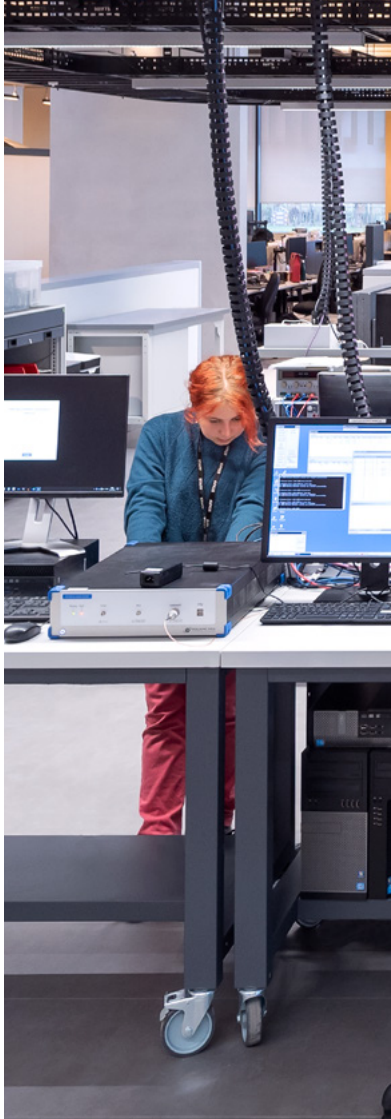
We are not new to the UAV safety domain – we have successfully brought other safety solutions to market.

Gotonomi™
A TTP company

We have world class expertise in radar, vision, fusion, algorithms and AI.

We are looking for:

- Investment partners to take PoC to a commercial design
- Go-to-market partners
- Partners for testing
- Partners to evaluate end-to-end use-case feasibility



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