

IAS ORCA UAS



IAS ORCA UAS is a modular, customisable day/night wide area optical search sensor.

Traditional Radar is size, weight and power dependant - the smaller the object of interest, the larger the radar required to find it. This is problematic for a tactical UAS with challenging weight/endurance constraints.

IAS ORCA optical radar does not suffer from this limitation – providing a single small form factor search system capable of detecting a wide range of objects of interest – including vessels, fast boats, rafts and people in the water.

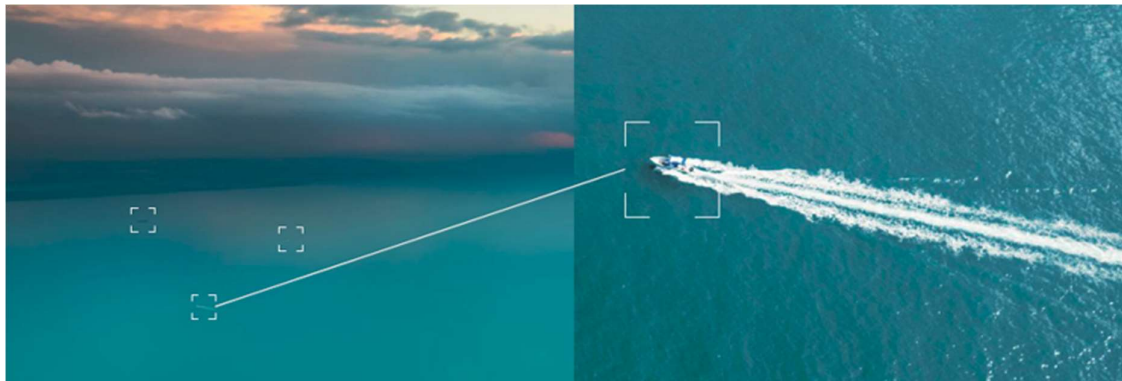
Additionally, ORCA is the only optical radar on the market capable of simultaneously both detecting and classifying targets – significantly reducing the time for naval operators to make decisions at sea.

A fraction of the size, weight and power of a traditional radar, ORCA uses a specially configured array of day and night optical sensors that continuously and autonomously scan the ocean in a 180-degree arc in front of the aircraft.

No electronic signature is required to detect – making this passive system perfect for covert operations

Everything on the ocean's surface is autonomously detected, presenting aircraft operators with a small image of each object found alongside its location coordinate on a map.

Australian designed, developed and manufactured, ORCA is the worlds leading day/night optical search system.



Australian Content

Intellectual Property behind IAS ORCA is designed and developed in Australia.

IAS also has developed manufacturing capabilities with partner organisations in Australia along with Australian based distribution channels.

ORCA UAS

Single EO/IR scanning array configured onto a gimbal and customized for TUAS flight profile.

- **Size:** 230mm diameter cylinder; 140mm high
- **Weight:** circa 4kg
- **Power:** circa 90W

Performance

Search capabilities are dependent on conditions, however indicative performance of a fast boat sized target would be:

- **Day:** 25nm search swath (12.5nm range to detect)
- **Night:** 15nm search swath (7.5nm range to detect)