



Unmanned Catamaran Fleet with UAVs

environmental, hydrological, search-and-rescue and security monitoring

MS-UCF is a fleet of four unmanned catamarans with integrated UAVs for autonomous missions around the clock: monitoring of water areas, coastal lines, marine traffic and underwater objects; search, identification and support of people; and border protection.



Route planning is adaptive, taking into account weather conditions, currents and the probability of target detection. Roles are distributed and reassigned within the group, and integrated neural networks search for people, marine life, vessels of all types, drifting and underwater objects, and anomalies. UAVs take off and land on a gyro-stabilized platform in sea states up to 5; thermal imagers support searching for people at night and in poor visibility, and the combination of underwater, surface and air observation maximizes mission efficiency. A modular electromechanical winch with a cable up to 100 m long immerses sensors, analyzers and samplers; customer equipment and chemical and radiological detectors and monitors can be integrated.

MONITORING

- Autonomy up to 72 hours
- UAV flight up to 45 minutes
- UAV charging 120 minutes
- Take-off and landing in waves up to sea state 5

SEARCH AND CONTROL

- People search and identification 24/7
- Water areas, coastal lines and marine traffic
- Underwater objects
- Border protection



Specifications

Platform		UAV group	
Unmanned catamaran	length 6000 mm, width 2500 mm, height 2500 mm	UAVs	integrated quadcopters, up to 10 (depending on mission)
Hybrid power engine	autonomy up to 72 hours	Maximum flight time	45 min
Displacement	1.5 t	Flight range	up to 10 km
Maximum payload weight	0.5 t	Full charge time	120 min
Speed	15 knots	Payloads (electromechanical winch)	
Temperature range	−35 to +60 °C	Water analysis	SpectroTRACER Aqua (Bertin GmbH)
Radio channel range (line of sight)	up to 60 km	Replaceable sensors	pH, temperature, salinity, pollution
Cameras		Radiation detection and monitoring	Mission Support α, β, γ detectors
Day and night vision, real time + zoom	8 video cameras 1920×1080; 2 thermal imaging cameras; 2 plug-in video cameras	Chemical detection	TIC and CWA detectors
		Sampling	samplers
		Winch	modular electromechanical, cable up to 100 m

Specifications are subject to change without notice.
Copyright © 2026 Mission Support. All rights reserved.

Mission Support · Alexanderveld 5, 2585 DB The Hague, Netherlands
E: info@cbrn-missionsupport.com · cbrn-missionsupport.com