



PATROL | INTERDICTION | RECONNAISSANCE | ATTACK | SEA DENIAL
SAR | AIR DEFENSE | C-UA(X) | UNMANNED OPERATIONS

Building a cost-effective and numerically credible naval vessel fleet is now achievable with Eureka Boats' AIRCAT Bengal. This next-generation vessel offers high-speed persistent multi-role capabilities, utilizing ESNA's Surface Effect Ship (SES) design and technologies proven in the international offshore energy industry.

Forward based AIRCAT Bengals are essential assets for enhancing threat deterrence with sustained presence and fast response engagement commitments. These vessels, equipped with extensive hard and soft kill capabilities, utilize cutting-edge modular warfighting systems to protect against threats on the surface, in the air, and under the sea. They serve as highly mobile counter UAS, USV, and UUV platforms, safeguarding critical infrastructure, naval bases, and larger vessels in various theaters of operations.

The operational resiliency and sea denial capabilities of AIRCAT Bengals in contested waters are reinforced by a mix of proven technologies, high speed, long range, stealth features, and non-kinetic and kinetic systems. Additionally, these versatile vessels support logistics and medical triage/evacuation in high-threat environments, ensuring operational efficiency in challenging arenas.

Prepared for littoral waters, AIRCAT Bengals function as scouting craft, escorts, patrol craft, gun and missile boats, drone launch and recovery platforms, and high-speed interceptors in shallow waters. They facilitate frontline scout reconnaissance operations while self-recovering from beaches.

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NAVAL EFFICIENCY BY DESIGN

EUREKA
NAVAL CRAFT

FASTER, SMARTER, COST-EFFECTIVE



MULTI-MISSION VESSEL PLATFORM	
PATROL INTERDICTION RECONNAISSANCE ATTACK SEA DENIAL SAR AIR DEFENSE C-UA(X) UNMANNED OPERATIONS	
PRINCIPAL CHARACTERISTICS	
Non-ITAR	
Class	BV
Length	36 m (118 ft)
Beam	14 m (45.9 ft)
Draft	0.8 m (2.6 ft) On Cushion / 2.4 m (7.8 ft) Off Cushion
Height Overall	13.1 m (43 ft)
Displacement (Full)	~ 170 mt (167.3 lt)
Structure	Marine Grade Aluminum
PROPULSION SYSTEM	
Propulsion	In-line Diesel/Waterjet - High Maneuverability
Main Engines/Power	4 x MTU 16V2000 M72 / 1440 kW
Max continuous rating (ISO Cond.)	4 x 1440 kW @ 2250 rpm
Speed (Max)	~47-50 kts (Subject to onboard loadout)
Speed (Cruise)	38 kts
Range (@ 38 kts)	1,000 nm
Generators	2 x 110 kWe (other options available)
SEA KEEPING/ STABILITY	
Sea State 3	Full Speed
Sea State 4	Reduced Speed
Sea State 5	Restricted Operations
Sea State 6	Survivable
ACCOMMODATIONS	
Total Accommodation	22
Crew	4-7 (Depending Upon Mission Requirements)
High Endurance	7-21 Days Embarked Endurance Depending Upon Onboard Complement (or Longer with Logistical Support)
Equipped with laundry, bathrooms, messing facilities (full kitchen galley), onboard water maker, climate control, front facing seating for all embarked personnel during high-speed transit	
AFT MISSION PAYLOAD DECK	
Area	55 sqm
Deck Capacity	20 tons
Integrated Stores Crane	1.745 mt
Highly adaptable - capable of accommodating variable 10ft and 20ft iso footprint containerized system loadouts	
OTHER FEATURES	
Prepared for operations in littoral waters with the added ability to land and self-recover from beaches	
Ergonomically designed: human factors, max pilot house visibility, equipment layout, low noise, internal clearances	
Purpose designed with embedded command-in-control (CIC) and onboard armory spaces	
Protective NATO STANAG ballistic protection around key areas within vessel - as required	
Optional IR and radar signature reduction using adaptive camouflage	
Water-level personnel and equipment launch and recovery ready (port and starboard side)	

FULLY NAVAL SYSTEMS INTEGRATION CAPABLE

Capable of accommodating variable defensive and offensive
Solutions configurations (non-kinetic and kinetic)



EXAMPLE COMBAT SYSTEMS CONFIGURATION: RECONNAISSANCE | ATTACK | V/M/SHORAD

ARMAMENTS

Fore Deck	1 x EOS R600 RWS - M230LF 30mm Chain Gun w/ coax M240B 7.62mm MMG and EchoGuard Radar/ EO Fire Control System, plus 4 x ATGM (Javelin or similar)
Bridge Deck	2 x EOS R400 RWS - "Slinger" AD - M230LF 30mm Chain Gun and EchoGuard Radar/ EO Fire Control System 2 x EOS R150 RWS - M134D 7.62mm Miniguns/ EO Fire Control Systems
Main Deck	2 x Manual M2HB 12.7mm HMG (Aft) 2 x Manual M240B 7.62 MMG (Aft), optional up to additional 4 x Manual M240B (Midship / Forward) Optional - Loitering Munitions Soft-Launched from Deckhouse Vertical Launching System (VLS) Space (20 x Hero-400 or similar)
Aft Mission Payload Deck	1 x 20 ft Rheinmetall Container w/ 126 x UVision Hero-120 Loitering Munitions 1 x 20 ft Container w/ 4 x Anti-Ship Missile, AShM (i.e. - Kongsberg NSM, SAAB RBS-15, MBDA Marte MK2/N, etc.)

RADARS

Echodyne EchoShield 4D 360 MESA Hemispheric Surveillance Radar w/ 4 x Flat Panel Array w/ Identification Friend or Foe
3 x Echodyne EchoGuard MESA Hemispheric Radar (Mounted to EOS R600 and R400 RWS)
1 x Furuno X-Band Navigation Surface Search Radar (FAR2218BB)
1 x Furuno S-Band Navigation Surface Search Radar (FAR2238SBB)

ELECTRO-OPTICAL SENSORS

5 x EOS FLIR (Mounted to EOS R600, R400 and R150 RWS)
1 x Rheinmetall MSP 600 (Includes Thermal Imager, Daylight Camera, Laser Range Finder and Dual Mode Tracker)
1 x Rheinmetall FIRStnavy (Medium Range - 360° Coverage of Sea, Air and Land Targets with Automatic Sensor)

DEFENSIVE SYSTEMS

1 x Rheinmetall MASS (Multi Ammunition Softkill System)
1 x 7km Counter UAS/Control System
1 x 1km UAS Jamming System
8 x M6 Countermeasure Discharger (32 x 66mm Smoke Concealment Discharger for NATO Q-STAG 401 Conforming Grenades)

COMMUNICATIONS

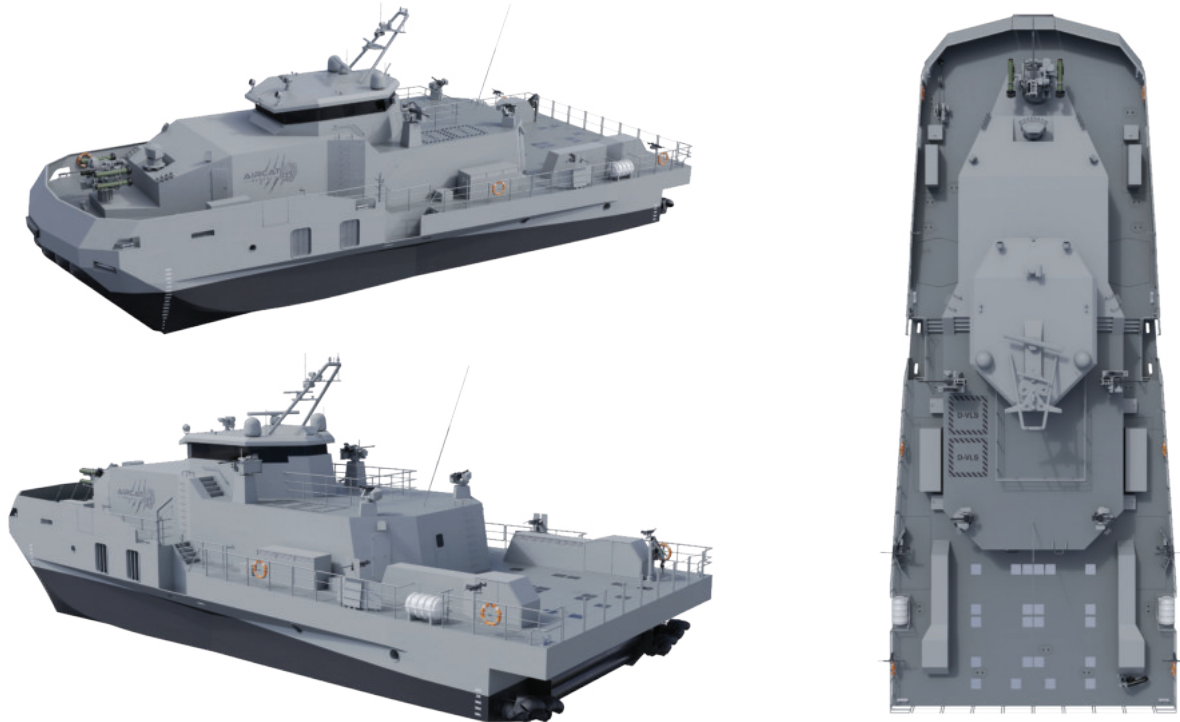
2 x SATCOM System
1 x Combat Management System with Data Link
1 x Data Distribution Unit
1 x Internal Crew Communications System
1 x External Communications System

ISTAR

2 x ISTAR UAV (i.e. - Aerovel Flexrotor - VTOL ISTAR AUV w/ 36hr endurance)

The above systems have been mapped for potential integration compatibility; however, purchasers of vessel(s) should engage directly with licensed defense system OEMs as Company is solely a provider of non-ITAR restricted vessel platform solutions and accordingly does not deal, trade, or resale items in which their export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.).

FORWARD OPERATIONS PROJECTION ENABLER



ADVANTAGES

Significantly Lower Cost to Build and Operate (Base Design in Active Production)	Small Crew / Optionally Remote Operation Capable	Uses Proven Commercial OEM Supported Propulsion & Navigation Systems	Excellent Operational Range at High Speed 1,000nm @ 38 kts	Stable Weapons Platform Enhancing Weapon Accuracy	Large available deck footprint for multiple mission systems
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KEY SPECIFICATIONS

LOA: 36 m (118 ft) Beam: 14 m (45.9 ft) Draft (On/Off Cushion): 0.8 m (2.6 ft) / 2.4 m (7.8 ft)	Crew: 4-7, plus additional 12-15 passengers (Variable Depending Upon Mission Requirements)	Speed: Max: ~47-50 kts Cruise: 38 kts Sea State: 6 Capable (Subject to onboard loadout)	Propulsion: Inline Diesel/ Waterjet – High Maneuverability Main Engines/ Power: 4 x MTU 16V2000 / 4 x 1440 kW	Aft Deck Area: 55 sqm Deck Capacity: 20 mt Stores Crane: 1.745 mt (ISO Lock Deck)	Class Approved Fully Model Tested Non-ITAR Surface Effect Ship (SES)
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Latest revision: October 2024

These specifications are subject to change without prior notification, all particulars are given in good faith, but without guarantee.