



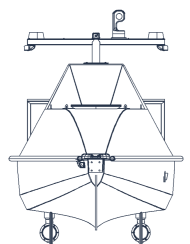
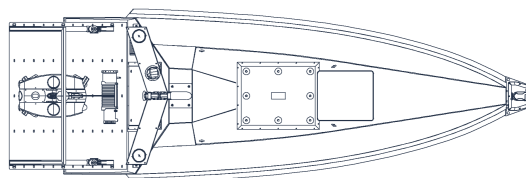
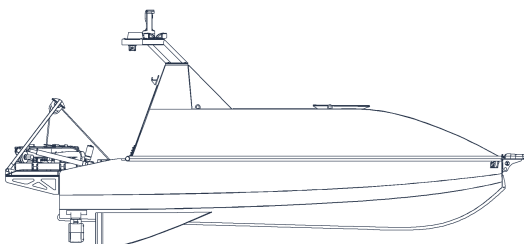
The LM450 is a versatile USV for offshore and coastal operations, featuring a rugged self-righting hull and dual 5kW 360° thrusters for precise control in tough conditions.

Its open deck and spacious interior support payloads like sonars, ROVs, and UAVs.

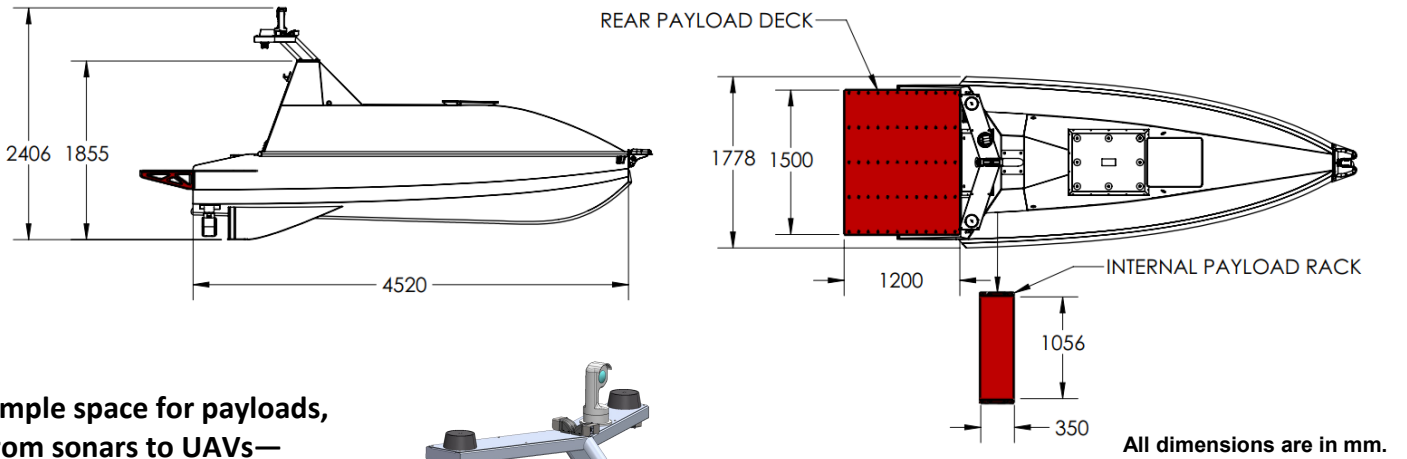
Specifications

General	
Hull Length	4800 mm (5300mm with payload deck)
Hull Width	1800 mm
Draft	440 mm — configuration dependent
Height	2400 mm (Mast up)
Displacement	630 kg — dry mass excluding payload
Hull	Displacement type & Self-righting
Hull Material	HDPE
Top Speed	5.5 kts, 10 km/h
Max Sea State	6
Propulsion	2 x 5 kW Electric omnidirectional thruster
Remote Docking	DockMaster with 3 kW charging
Endurance	<p>Configuration types:</p> <p>6 Months – Max endurance without human intervention (requires Lemvos DockMaster station).</p> <p>30 Days – Max continuous mission duration without docking (diesel-solar hybrid).</p> <p>34 Hours – Single mission endurance for pure electric version.</p> <p>All mission endurance values depend on the specific mission parameters.</p>

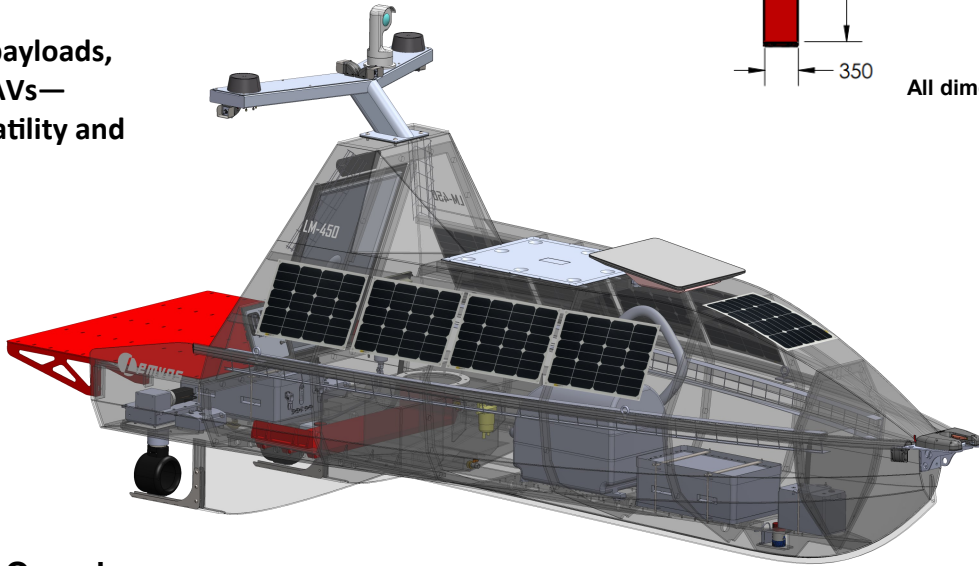
Power and Energy	
Power Generation	3.5 kW diesel generator + 350 W Solar
Fuel Capacity	170 l Diesel — Additional range extender tanks available
Battery Capacity	12.8 kWh Additional battery capacity available for pure electric version
Control and Connectivity	
Controller	Dual Redundant Lemvos AutomatePro — configuration dependent
Situational Awareness (options)	Camera, AIS receiver, Sonar, Radar
Connectivity (options)	Starlink, 4G/5G, Iridium, WIFI
On Board Processor Module	NVIDIA Jetson Orin (AutomatePro)
Control Interface	Lemvos Ground Control Station (PC based)
Payload	
Max Payload	330 kg—configuration dependent
Payload Bay Available Voltages	230 VAC, 48 VDC, 24 VDC, 12 VDC, 5 VDC
Max Payload Power supply	2.5 kW—configuration dependent
Internal Payload Volume	1056 x 350 x 500 mm
External Payload Volume	1500 x 1200 x 1000 mm



General Layout



Ample space for payloads, from sonars to UAVs—designed for versatility and efficiency.



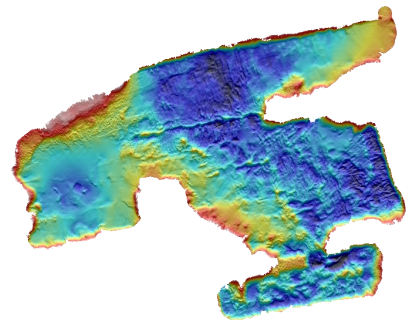
Payload Areas Overview

The items in red represent the internal and external payload areas. The external payload deck and internal payload rack are removable for payload integration.

Applications



LM450 with Ping DSP Sonar



Quarry Lake Surveyed by Lemvos

- **Security & Defense** : offshore infrastructure monitoring, monitor ports, and borders.
- **Marine Research**: Gathers data on marine life and water quality.
- **Data Collection**: Environmental and oceanographic research.
- **Search & Rescue**: Supports emergency response in maritime environments.