

USV CHALLENGER

VESSEL SPECIFICATION SHEET



IMR, SURVEY AND ROV SUPPORT VESSEL

The USV Challenger is a light intervention, inspection, and survey support vessel owned by USV AS, a partnership between DeepOcean, Østensjø Rederi, and Solstad Offshore. This uncrewed vessel provides a low- to zero-emission alternative, equipped with advanced onboard sensors that enable efficient subsea operations, including the novel launch and recovery system for the work-class ROV. The vessel is remotely operated from the Remote Operations Centre (ROC) at Killingøy.

USV Challenger is certified and approved for both crewed operations within Trade Area 4 (Fartsområde 4) and uncrewed operations within the Norwegian sector (economic zone). The vessel features multiple layers of redundancy to enhance systemic resilience, effectively minimising the risk of downtime.

KEY VESSEL FEATURES

- FULLY REMOTE OPERATED UNCREWED VESSEL
- MULTI-LAYERED REDUNDANT COMMUNICATION SYSTEM
- HIGH-PERFORMANCE ELECTRIC WORK-CLASS ROV
- ACTIVELY GYRO STABILISED VESSEL
- 492 kWh OF BATTERY POWER
- NOVEL IN-HOUSE LARS DESIGN
- 1 500 M WROV UMBILICAL
- CERTIFIED FOR 4 x CREW WITHIN TRADE AREA 4
- SEASTATE 7 WMO SURVIVABILITY
- 42 IP CAMERAS
- PORTS CALL ALONG THE NORWEGIAN COAST
- STATION KEEPING

CLASSIFICATION

CLASS	DNV 1A EO Battery (Power) ER (SCR) Cyber Secure (Essential)
NMA	Cargo ship less than 24 meters Norwegian Ship Register (NOR) (Crewed) - Fartsområde 1-4 (Uncrewed) - Norwegian Continental Shelf (Trade Area North Sea and Baltic)
FLAG	NOR

POSITIONING

STATION KEEP	Maritime robotics station keep and Joystic system
REFERENCE SYSTEM	Seapath 130/MRU (GNSS/INS), Furuno SC-703 HIPAP 502

NAVIGATION

SITUATIONAL AWARENESS	Maritime Robotics SeaSight X 8 x LWR (Long-Wave Infrared) Furuno FAR-1518 radar Furuno DRS4D-NXT radar FLIR M364c 8 x CCTV outside dome cameras 34 x internal CCTV cameras
NAVIGATION EQUIPMENT	2 x Simrad GC-80 Gyro Compass Simrad S-3009 Echosounder Simrad SAL R1A Speed Log 2 x Furuno Coastal ECDIS Tron AIS TR-8000 MKII Class A 2 x Deif WSS 750 wind sensor Sailor 7222 VHF DSC Class A GMDSS IHM Flexible-IP (VHF VoIP)
COMMUNICATION	2 x VSAT 2 x 4G/5G 2 x Starlink, Iridium SBD, Iridium Certus

ROV

WORK CLASS ROV	Argus 210 Hp electrical WROV
LAUNCH & RECOVERY	Evotec 6 Te SWL electrical winch Automated L&R Novel design 1 500m umbilical

ACCOMMODATION (DAY TIME)

4 pax (Trade Area 5)
Pantry
WC
Shower
Pullman beds
Day room with Pantry

DIMENSIONS

LENGTH	23.5 m
LENGTH (LOA)	26.9 m
BREADTH	7.5 m
DRAUGHT	3.5 m
DEADWEIGHT	57 Te
LIGHTWEIGHT	284 Te
GROSS TONNAGE	220 Te
DEADWEIGHT	57 Te
AIR DRAFT	14 m

PROPULSION

PROPULSION SYSTEM	Hybrid Diesel-Electric with batteries
MAIN ENGINE	2 x Volvo Penta D16 MH IMO III,
ENGINE POWER	2 x 588 mkW
GENERATORS	2 x 525 ekW
BATTERY CAPACITY	490 KW
AZIMUTHS	2 x 375 kW
BOW THRUSTER	1 x 190 kW Pump Jet

PERFORMANCE

SPEED MAX	9.7 kts
ECO SPEED	8 kts
ENDURANCE	14 - 30 days
SEASTATE	7 WMO SURVIVABILITY
STATION KEEP LIMIT	2.5 M

TANK CAPACITIES

FUEL	40 m ³
UREA	3 m ³
BILGE WATER	7 m ³

CONSUMPTION

TRANSIT 9.7 KTS	~ 4.6 m ³ / day
TRANSIT 8 KTS	~ 2.5 m ³ / day
STATION KEEP	~ 0.9 m ³ / day
SHORE	~ 0 m ³ / day