

C-EXPLORER 2

Merge the reliability and experience of the C-Quester submersible with an economic, modular, and versatile work-platform for research, exploration, scientific and offshore applications and you get the ultimate submersible for oceanographic activities, the C-Explorer. With its practical configuration and full 360-degree acrylic pressure hull, this exceptional submersible cruises at 3 knots below the surface offering unparalleled performance.



Dimensions and Weight

Dimensions LxBxH	431 cm x 323 cm x 207
Storage Width	244 cm (Deflated tanks)
Weight (ex. passengers)	Starting from 3484 kg (Salt water)
Maximum Allowable Payload	220 kg (Salt water)

General Characteristics

Occupants	1 pilot and 1 passenger
Maximum Operating Depth	100 metres / 330 feet up to 1,000 metres / 3,300 feet
Operational Autonomy	8 hours, up to optional 16 hours
Pressure Hull Material	Acrylic
Hatch Type	Top-Hatch (Optional Clamshell)
Type	Dry, 1 atmosphere submersible
Classification	Germanischer Lloyd
Maximum Sea State	3

Propulsion

Propulsion Type	Electrical
Propulsion Horizontal	2 x 2.0 kW Thrusters (upgrade to 5.0 kW available)
Propulsion Vertical	2 x 2.0 kW Thrusters (upgrade to 5.0 kW available)
Surface Speed	4 knots
Underwater Speed	3 knots

Life Support Systems

Oxygen System	Continuous Flow
Mission Oxygen Capacity	2 Litre (Quick Exchange)
Emergency Oxygen Capacity	2 x 13.4 Litre @ 200 bar
Carbon Dioxide Removal	6 hours with Calcium Hydroxide
Survival Period	96 hours
Emergency CO2 Removal	Lithium Hydroxide Blankets
Autonomous Breathing Device	2
Life Support Monitoring	2 independent life support monitors (O2 - CO2)

Ballast & Buoyancy Systems

Number of Ballast Tanks	4
Main Ballast Tank Capacity	2100 Litre
Compressed Air Capacity	4 x 50 Litre @ 200 bar
Hydraulically Releasable Weight	100 kg
Buoyancy Tank	50 Litre

Power Capacity

Total Power Capacity	Standard 21.6 kWh Optional 43.2 kWh
Battery Type	High Capacity Lithium-ion
Propulsion System Capacity	Std: 2 x 130VDC Li-ion Battery Packs - 15.6 kWh Opt: 4 x 130VDC Li-ion Battery Packs - 31.2 kWh
House System Capacity	Std: 2 x 24VDC Li-ion Battery Packs - 6 kWh Opt: 4 x 24VDC Li-ion Battery Packs - 12 kWh
Charging (Optimal Cycle)	4 - 6 hours
Emergency Battery	96 hours for Critical Systems

Navigation, Communication, Auxiliary

Air Conditioner System	7,000 BTU
Underwater communication	Single sideband acoustic telephone, 25 kHz
Surface communication	VHF Handheld Unit
Navigation (standard)	Echosounder, Magnetic Compass
Information	Alarm System, Battery Monitoring, Digital Internal Pressure, Digital and Analogue Depth Gauge, Insulation Monitoring, Water Sensors and Battery Compartments, Freon Sensor, Buoyancy tank Level Indicator, External Temperature Sensor
Safety Equipment	Pinger Tracing System, Emergency Releasable Buoy, Analogue Internal Pressure Monitoring, Dead-man Switch, Fire extinguisher, External valve and air connection for diver-assisted ascent
Other	Protective Cover for Acrylic Viewport, Magnetic Rubber Protector Ring Mating Flange, Checklists and Operations/Technical/Maintenance Manuals