

- ROV Name: Lord Of The Arctic (LOTA)
- Total cost: \$3506.22
- Weight: 10Kg
- Safety features:



Company specs

From left to right:

- Zeyad Medhat: Electrical engineer, Co-pilot, Ergonomics director/ year 2/ 2nd year in underwater robotics.
- Ahmed Ehab: Electrical engineer, pilot, CFO/ year 1/ 3rd year in underwater robotics.
- Nouran Soliman: CEO, Co-pilot, software developer/ year 2/ 4th year in underwater robotics, R&D Engineer.
- Maha Moustafa: Mechanical engineer, Tether-woman, Technical writing director/ year 2/ 2nd year in underwater robotics.
- Sondos Omar: Mechanical engineer, payloads-installer, Safety officer/ year 1/ 3rd year in underwater robotics.
- Ahmed Hamdy: Software developer, tether man, R&D Engineer.
- Ahmed Gamal: Mechanical engineer, Tether-man, Logistics director/ year 1/ 2nd year in underwater robotics.





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ROV specs

- 1. No sharp edges
- 2. Frame encloses all the ROV components inside it
- 3. A safety rope is tied to the frame to pull the ROV when needed during testing.
- 4. The converters have a built-in temperature sensor to shut down the power supply if overheating occurs.
- 5. A barometer is used to detect any leakage through the end caps of the electronics cans.
- 6. Two water sensors are installed in each tube to detect any water leakage.
- 7. A temperature sensor detects any rise in electronic cans' temperature above a certain user-defined threshold.
- 8. A current sensor is used to monitor the current of each thruster for safety.
- 9. A kort nozzle is attached to each motor for safety reasons.
- 10. The control station has a programmed safety section and an auto-shutdown system for any emergencies.
- 11. A safety button for system power-off and a main 40A fuse are installed in the control station.
- 12. All the power plugs are covered and all the wires are secured tightly.
- 13. An I/V sensor is used to monitor and display the total voltage and current consumption of LOTA.
- 14. The manipulator servos have a separate converter to avoid any system failure if current drainage increased due to jamming.
- 15. A safety trolley is used to ease transportation.

