

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENT

SI No.	Description of items	Quantity
PUR/510/DMS/RM/E/2019-20		
Underwater High Discharge Battery in enclosure with charger		
1	Underwater non-metallic, light-weight water-tight enclosures [Outer dimensions: within 50 X 150 X 250 mm or within diameter 50 X 250 mm] with removable end cover(s) and cable penetrators/glands (minimum 04 nos.) for charging and discharging cables; vent and plugs (07 nos.); enclosure clamps (02 nos.)	2 sets
2	14.8V DC (Minimum), 17AH (Minimum) Li-PO/Li-Ion battery with minimum 50 cm cable for discharging and with minimum 20 cm charging cable with underwater male-female connectors	4 sets
3	Compatible Battery Charger	2 sets

Annexure – I

1. End Use:	The material will be used for operating a robotic system (R&D prototype) in underwater conditions with a minimum depth of 20m
2. Detailed specification:	<ul style="list-style-type: none">• Enclosure: Non-metallic, Outer dimension (Max.) within 50 X 150 X 250 mm (if rectangular) or within diameter 50 X 250 mm (if cylindrical)• Removable End Cover: Metallic or Non-metallic End Cover(s) with provision of easy assembly & disassembly with proper water tightness using O-rings and Flanges and holes for cables• Cable Penetrators: Minimum M10 Cable penetrators• Li-PO/Li-Ion Battery:<ul style="list-style-type: none">✓ Supply voltage (Minimum) 14.8V (Min.)✓ Continuous load current (Minimum) 17AH✓ Minimum peak load current 30A✓ Min. length of cables: charging cable 20 cm, discharging cable 50 cm✓ Connectors: Female underwater connector fitted to charging cables & male connector fitted with the female connector• Overall weight: within 2.5 Kg (including battery, enclosure, battery protection circuitries, cables & connectors)• Compatible Charger: 230V 50Hz AC compatible with the above Li-PO/ Li-Ion batteries
3. Scope of supply & incidental services:	<ul style="list-style-type: none">• Two set of batteries within the enclosures with end covers closed; the charging and discharging cables connected to the batteries and out from the enclosure through cable glands; battery protection circuits against short-circuit and excess current; charging cable fixed with underwater female connectors outside the enclosure; vents & plugs fixed at the holes• Two set of batteries along with properly insulated charging and discharging cables• All the rest underwater connectors; cable penetrators/ glands; vents; plugs; O-rings separately in a container/ packet for the operation of the above batteries• Balanced Chargers with necessary cables and connectors for use with 230V 50Hz AC system• Test Certificates duly signed by the appropriate authority
4. Acceptance test:	<ul style="list-style-type: none">• Leakage Test• Charging & Discharging Test• Reverse Polarity & Short Circuit Test• Temperature Test
5. Qualification criteria if any:	<ul style="list-style-type: none">• Nil

