

# PARANG-5500

## Unmanned Surface Vehicle



- Wave-Piercing Hull for better seaworthiness
- Modular Sub-Gondola (Attachable & Replaceable)
  - For various sensors (MBES, SBP, SSS, etc.)
  - For a lower center of gravity and minimum rolling
- Remote-Control Range
  - Wi-Fi (2 km) / LTE / Iridium(Unlimited)
- Hybrid Propulsion System
  - Self-charging battery or engine propulsion
- Long-range navigation (up to 5 days)

### Specifications

|                 |                                                                |
|-----------------|----------------------------------------------------------------|
| - Weight        | Approx. 1,000 kg                                               |
| - Dimension     | 5,500 mm X 950 mm X 2,000 mm                                   |
| - Material      | Aluminum                                                       |
| - Maximum Speed | 6 knots                                                        |
| - Endurance     | 5 days (at 4 knots)                                            |
| - Payload       | Up to 100 kg                                                   |
| - Propulsion    | 6 kW   2500 rpm   Electric thrust motor                        |
| - Generator     | 12 kW   48 VDC   Diesel                                        |
| - Battery       | LiFePO4 48 VDC 175 A                                           |
| - Operation     | Autonomous Mode+ (Mission Planning)<br>Remote control Joystick |

### Integration Options

- Side-Scan Sonar
- Sub-Bottom Profiler
- Fluorometer, ADCP, CTD, etc

### Onboard Sensors

|              |                                                                      |
|--------------|----------------------------------------------------------------------|
| - Weather    | Wind direction / Wind speed Air Temperature<br>/ Barometric Pressure |
| - Bathymetry | Multi-Beam Echo sounder / IMU (Pitch, Roll, Heave, Heading)          |
| - GNSS       | DGPS Receiver                                                        |
| - CCTV       | NTSC or PAL   6ch                                                    |

### Communication Specifications (User Selectable)

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| - Wi-fi AP          | 2.4 GHz 10/100 Base-T / IEEE 802.11 b/g/h              |
| - Bridge Modem      | Over 5 dBi Omni Antenna   2 km                         |
| - Radio Modem       | ISM 900~928 MHz   Serial UART   4 km                   |
| - Remote            | 1616~1626.5 MHz   Iridium   Unlimited                  |
| - Remote Controller | 2.4 GHz(Wi-fi) or 900 MHz(RF)   2~4 km * Joystick Mode |