

## Unmanned Surface Vehicle [PARANG-5000]



- ✓ Wave-piercing hull for better seaworthiness
- ✓ Attachable and replaceable sub-gondola
  - For various sensors (MBES, SBP, SSS, etc.)
  - For lower center of gravity and minimum rolling
- ✓ Unlimited remote-control coverage
  - Wi-fi(2km) / RF(4km) / Iridium(Unlimited)
- ✓ Self-charging battery or engine propulsion
- ✓ Long-range navigation (up to 5 days)

### Specifications

Weight	About 1000kg
Dimension	5000mm X 950mm X 2085mm
Material	FRP & Aluminum
Maximum Speed	6knots
Endurance	5days @ 4knots
Payload	100kg
Propulsion	7.5kW   2500 rpm   Electric thrust motor
Generator	12kW   48VDC   Diesel
Battery	LiFePO4 48VDC 150A
Operation	Unmanned AUTO(Mission Planning)   Remote control Joystick
Console	Waterproof Portable Case

### Sensor Specifications

Altimeter	Single-beam Echo Sounder(200kHz)
Weather	Wind direction   Wind speed   Air Temperature   Barometric Pressure
GNSS	DGPS Receiver
CCTV	NTSC or PAL   2ch

### Communication Specifications (User Selectable)

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

### INTEGRATION OPTIONS

Multi-Beam Echo sounder  
 IMU (Pitch, Roll, Heave, Heading)  
 Side-Scan Sonar  
 Sub-Bottom Profiler  
 Fluorometer, ADCP, CTD  
 etc

### APPLICATIONS

Security & Surveillance  
 Hydrographic Survey  
 Scientific Research  
 Environmental Monitoring  
 Data Harvesting