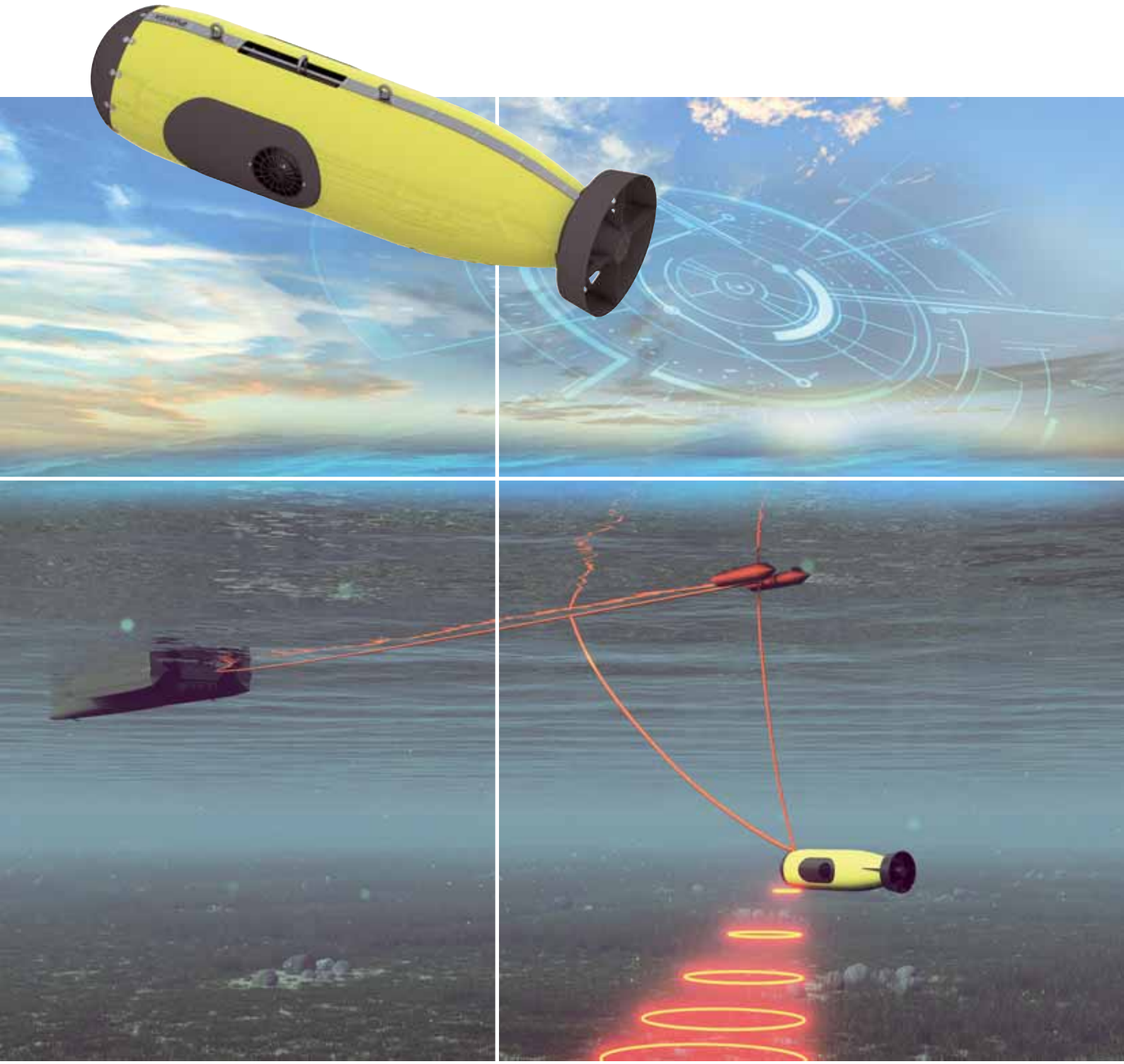
Patria

Sonac ACS

Acoustic Mine Sweep



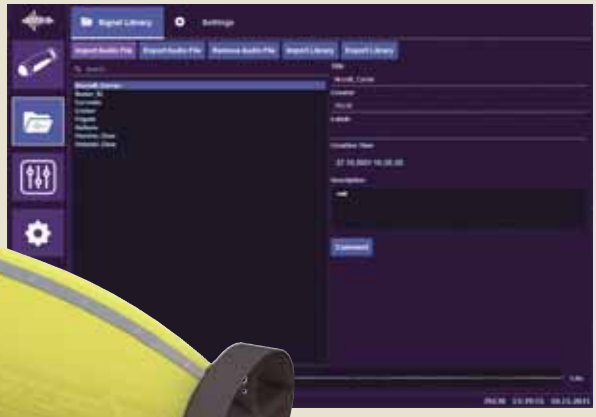
Sonac ACS - Acoustic Mine Sweep

Sonac ACS is a cutting-edge acoustic mine sweep specially designed for sweeping modern influence mines with advanced acoustic triggering. ACS effectively simulates the sound of any ship, thus providing outstanding performance for Target Simulation Mode (TSM). It is capable of transmitting recorded acoustic waveforms with high sound pressure over a large frequency band.

The acoustic sweeping gear is monitored and controlled with onboard software during the mission. The software includes views for telemetry and status of the gear as well as controls for adjusting the gear settings in real-time. At any time, the operator can select the desired acoustic signature from signal library for transmission as well as use a tool for designing custom waveforms.

The acoustic sweeping gear has a comprehensive command protocol interface that enables full integration into other systems.

Due to the streamlined, compact form and lightweight design, Sonac ACS can be effortlessly towed with an Unmanned Surface Vessel (USV) or similar small vessel. Desired sweeping depth can be set with a float or depressor, or alternatively Sonac ACS can be mounted on another tow frame. Spatial diversity of the acoustic mine sweeping system can be easily extended by towing multiple ACS in a row.



Main components

- LF transmitters (low frequency)
- MF transmitters (medium frequency)
- HF transmitters (high frequency)
- Hydrophone for monitoring acoustic output
- Composite shell with a rigid frame
- Passive pressure compensation unit for each LFT
- Electronics housing
- Software for controlling and monitoring the sweep gear

Physical characteristics

- The sound producing elements are inside the hull.
- Outer shell design is favourable for modular design with numerous options.
- Hull allows integrations of additional elements, e.g. an echo repeater.
- Frame allows the integrations of additional sensors, e.g. sonar or optical sensors.

Technical details

- Length: 256 cm
- Diameter: 68 cm
- Weight in air: 400 - 500 kg
- Weight in water: 180 - 220 kg
- Frequency range: 7 Hz - 70 kHz
- Power supply (preferred):
  - 6 kW
  - 3P ≈ 380 - 440 VAC 50 - 60 Hz
- Data interface: Ethernet
- Tow drag at 6 knots without cabling: < 2 kN

Patria

Hatanpään valtatie 30, FI-33100 Tampere, Finland | Tel. +358 20 4691 | info@patriagroup.com | www.patriagroup.com