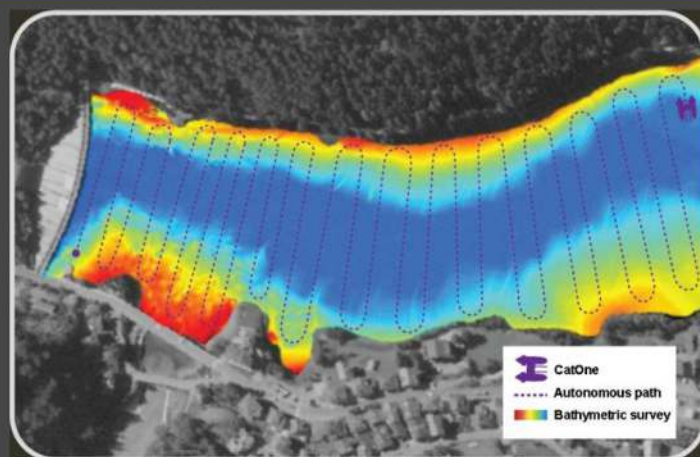


CatOne HD4

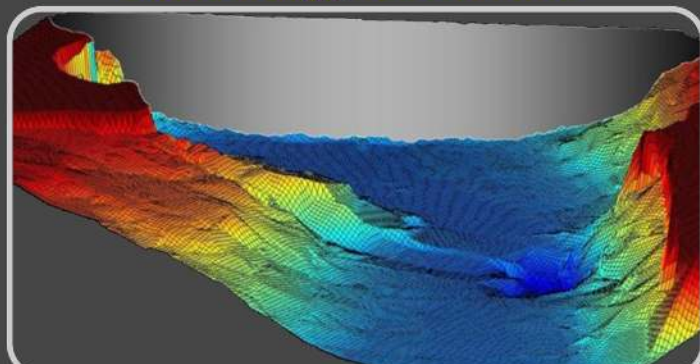


Innovation leveraged to hydro geologic and environmental surveys

- A family of **robotic vessels** for data acquisition, monitoring, patrol and Search & Rescue support
- Adjustable **autonomy levels**, from remote guidance to full automation
- Automation increases the **productivity and quality** of the survey
- The **safe, efficient and economically convenient** alternative to traditional survey methods based on manned vessels
- Particularly suited for repetitive, long endurance tasks, in remote or dangerous areas or in critical environments (*i.e. dam basins, lakes exposed to landslides risks or contaminated areas*)
- Suited also for operation during night, when survey conditions are optimal
- Compatible with environmentally protected areas, such as parks and natural reserves
- Easily customized to customer requirements



Technology on the field



Operating Environment



**Dam basins,
lakes**



**Quarry
lakes**



**Water
reservoirs**



**Rivers,
canals**



Fishfarms



**Harbours,
Lagoons**

Typical payloads



**Single beam
echosounders**
Water depth



**Multibeam
echosounders**
Water depth
Very Hi Resolution



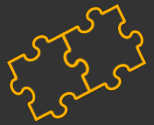
**Sidescan
Sonars**
Underwater
Imaging



**Multiparametric
probes**
Water temperature,
salinity, turbidity, pH,
Chlorophylla, etc



**Electrical
Tomography**
Seepage
detection in
canals



**Customer
equipment**
Call us for new
applications !

Technical characteristics

| | |
|---------------------------|--|
| Length | 1.95 m |
| Width | 1.34 m |
| Draft | Few centimeters, no submerged propellers or rudders (suitable very shallow water with algal growth) |
| Empty weight | 30 kg |
| Payload | up to 50 kg |
| Propulsion | Full electric, air propellers |
| Operating speed | 3 kn (6 km/h) |
| CO ₂ emissions | none |
| Operations | Day and Night |
| Navigation modes | Fully Autonomous ↔ Manual Remotely controlled |
| Endurance | up to 8 h, can be extended with optional battery packs |
| Operators | one operator can control up to 3 vessels |
| Logistics | deployable in 10 minutes (transported over the roof of a car or inside a Station Wagon) |



The modern solution for:

- Bathymetric surveys in fresh or shallow waters
- Stream profiling with Doppler acoustic sensors
- Leaks detection in channels through electric tomography
- Images and videos collection in water environment
- Water sampling
- Environmental data collection
- Research and experimental activities