

...a sound decision

**Design and Commissioning of Innovative Hydrographic Systems**

**Support of ATLAS Echosounders and Third Party System Components**

**Worldwide Service Network**

**Remote Maintenance**

**Long-time Provision of Spare Parts**

**Tailor-made Solutions at a Favourable Price**



## ATLAS IS<sup>3</sup>

### ATLAS INTEGRATED SURVEY SENSOR SYSTEM

System competence for hydrographic & research ships is an increasing demand. As an international renowned systems company we are a leading partner of survey companies, research institutes, navies and shipyards throughout the world. We are engaged in the design, development, sales and support of leading edge hydrographic survey systems. Our capability is based on more than 100 years experience with the establishment of widely recognised products names such as ATLAS DESO, FANSWEEP, HYDROSWEAP and PARASOUND.

ATLAS HYDROGRAPHIC GmbH is a member of Bremen-based ATLAS ELEKTRONIK group supported by a worldwide network of associate companies and agents. From the headquarter in Bremen we provide innovative state-of-the-art hydrographic system solutions and products designed to meet most demands of the scientific and hydrographic community.

Our company offers from one source complete ATLAS Integrated Survey Sensor Systems (IS<sup>3</sup>) composed of single beam or multibeam echosounders, sub-bottom profilers, auxiliary sensors such as GPS receivers, sound velocity instruments and inertial systems as well as data acquisition and post-processing software. Regardless of which hydrographic application or water depth your company is working with, ATLAS HYDROGRAPHIC can present tailor-made solutions at a favourable price.

#### SYSTEM CONCEPT

The ATLAS IS<sup>3</sup> is designed according to the fundamental criteria performance, reliability, simplicity and data safety.

A typical system layout of the ATLAS IS<sup>3</sup> is composed of various sub-systems as follows:

- **Administration** offers the operator comprehensive control, monitoring and maintenance of the complete ATLAS IS<sup>3</sup>.
- **Echosounders** is the group of sonars dedicated to hydrographic and oceanographic tasks.
- **Auxiliary Sonars** comprises the group of independent acoustic products dedicated to navigation aid, fishery research or current measurements.
- **Synchronisation** avoids acoustical interferences between echosounders and auxiliary sonars.
- **Auxiliary Sensors** is a collection of supporting instruments necessary to obtain time-tagged and geo-referenced oceanographic data either in real-time or post-processing.
- **Post-Processing** is a group of computers to deal with data acquired by the different sensors onboard. It may be independently operational or linked to the sensor network.
- **Sensor Network** interconnects all sub-systems.



## THE SYSTEM AT A GLANCE ...

Open Architecture  
Intelligent Network  
Technology  
Distributed Interface  
Processor  
Integrated Data  
Management  
Easy-to-Operate  
Acoustic  
Synchronisation

# ATLAS IS<sup>3</sup>

## ATLAS INTEGRATED SURVEY SENSOR SYSTEM

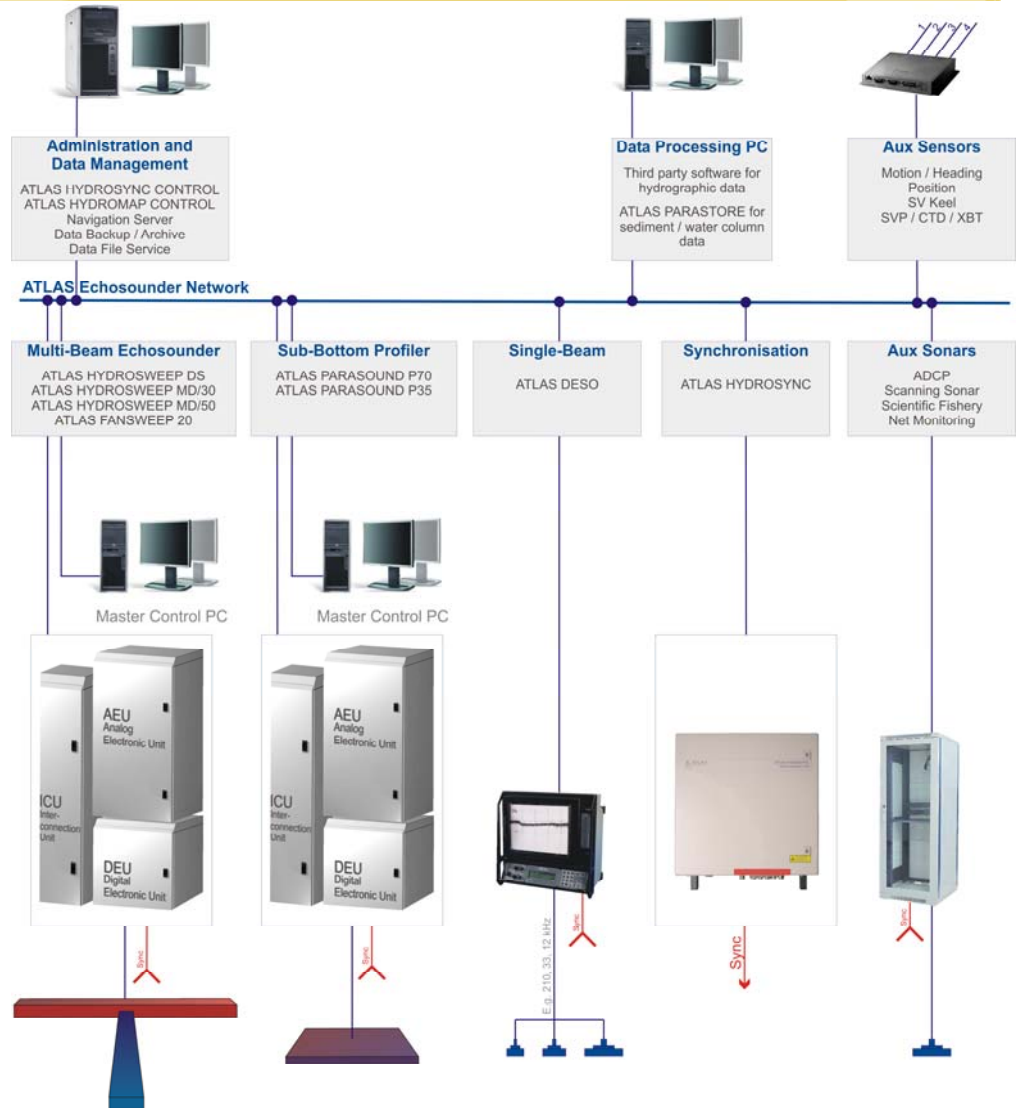


Figure: Common ATLAS IS<sup>3</sup> System Overview

## SUB-SYSTEMS AND TYPICAL COMPONENTS

### ADMINISTRATION

- Network based client / server architecture
- Control and acquisition software ATLAS HYDROMAP CONTROL, ATLAS PARASTORE
- Central data management and backup
- Multi-user setup: e.g. admin, user and watch keeper
- Server based data storage and archiving

### ECHOSOUNDERS

- Single beam echosounders ATLAS DESO
- Multibeam echosounders ATLAS FANSWEEP 20 ATLAS HYDROSWEEP MD ATLAS HYDROSWEEP DS
- Sub-bottom profiler ATLAS PARASOUND

### AUXILIARY SONARS

- Navigational echosounders, Doppler log, ADCPs, fishery sonars, catch monitoring systems

### AUXILIARY SENSORS

- Motion, heading, position, sound velocity
- DIP Distributed Interface Processors

### POST-PROCESSING

- Computers, printers, plotters
- High bandwidth Ethernet LAN
- Processing and visualisation software ATLAS PARASTORE

### SYNCHRONISATION

- ATLAS HYDROSYNG acoustic synchronisation hardware for 4 or 8 channels
- ATLAS HYDROSYNG CONTROL software

### SENSOR NETWORK

- High bandwidth Ethernet LAN
- NTP time synchronisation
- CAT6 copper cabling (1Gbit/s) or fibre-optical cables (1 Gbit/s or 10 Gbit/s)
- Intelligent separation of online and offline traffic

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