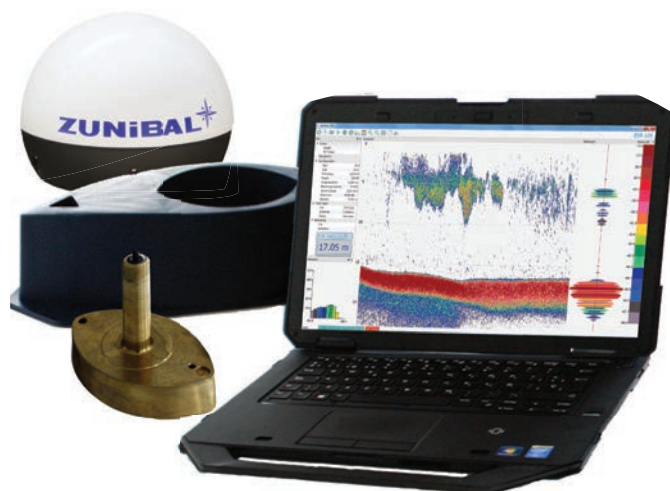# ZSR
Zunibal Scientific Sounders

❶ ADVANTAGES

- » Low Cost
- » Low Power Consumption
- » User Friendly Logging Software
- » Built-in Calibration Software
- » Raw and Echoview® format files output
- » Replay of Data
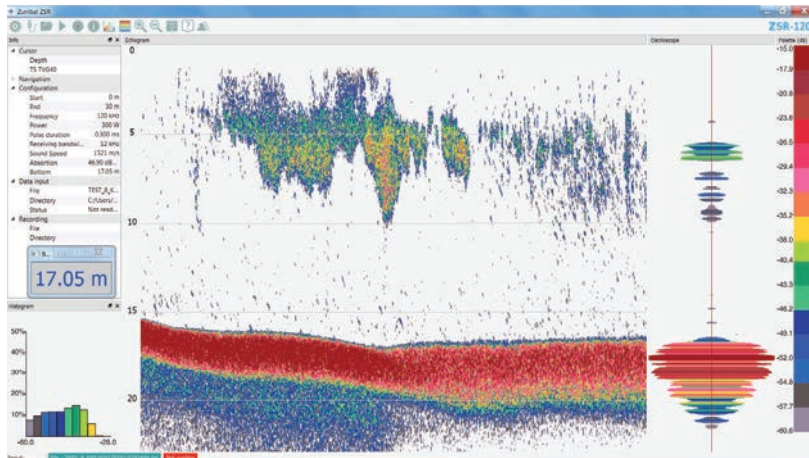- » GPS, Temperature, Pitch and Roll Integrated Data
- » Technical Support

❷ FEATURES

- » Frequencies: 50, 120 and 200 kHz
- » Fishing and Scientific operational modes: Active/Passive, Replay, Record and Calibration
- » Electrical Transmit Power adjustable in steps
- » Pulse Duration adjustable in steps
- » Ping Rate adjustable
- » Receiver Dynamic Range of 120 dB
- » Airmar® transducer

The Zunibal ZSR scientific echo sounders can collect and store accurate acoustic backscattering data that can be post-processed and replayed. They are principally designed for fishery research; however, due to their flexibility and ease of use are also suitable for professional fisheries. Their modular architecture allows both fix mounting and portable version.

❸ SOFTWARE

» Compatible with Windows XP, 7, 10

» Transceiver control: operation mode, transmit power, pulse duration, ping rate, data collection range, maximum output file size

» Manual input: temperature, salinity, sound speed, absorption, gain, equivalent beam angle

» 11 colour palettes

» Echogram view:
>   Volume Backscattering strength
>   Target strength

» Built-in calibration application

» External sensor inputs: GPS, Temperature, Pitch and Roll

❹ SYSTEM LAYOUT

» Modular Architecture

» Robust and easy to maintain

» Portable version in rugged case

» Usable with third-party computer with minimum specifications

» Able to connect with other sensors and systems

» Ethernet communication

Processor unit

GPS

Ethernet

System unit

Power supply AC/DC

Transducer