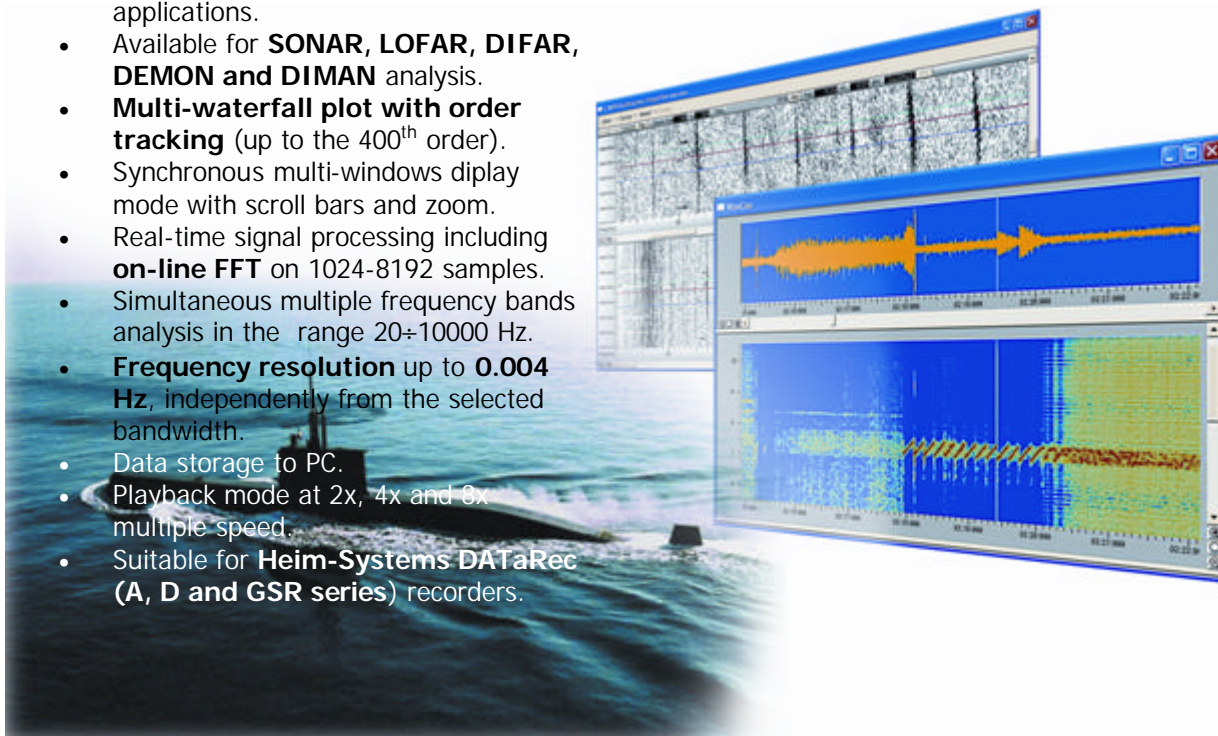


GLE/WPS Waterfall Process Signals

Real-time and post-processing software for underwater acoustic analysis

- Real-time data visualization and analysis software for acoustic signals emitted by rotating parts in naval applications.
- Available for **SONAR, LOFAR, DIFAR, DEMON and DIMAN** analysis.
- **Multi-waterfall plot with order tracking** (up to the 400th order).
- Synchronous multi-windows display mode with scroll bars and zoom.
- Real-time signal processing including **on-line FFT** on 1024-8192 samples.
- Simultaneous multiple frequency bands analysis in the range 20÷10000 Hz.
- **Frequency resolution up to 0.004 Hz**, independently from the selected bandwidth.
- Data storage to PC.
- Playback mode at 2x, 4x and 8x multiple speed.
- Suitable for **Heim-Systems DATARec (A, D and GSR series)** recorders.



GLE/WPS (Waterfall Process Signal) is a software tool specifically developed for naval environments and it is addressed to analysis of acoustic waveforms emitted by rotating parts. Its purpose is the identification of boats by means of techniques based on the harmonic analysis and AM/FM demodulation. **GLE/WPS** supports different kind of algorithms, including **SONAR, LOFAR, DIFAR, DEMON and DIMAN**. Among other functions, FFT (Fast Fourier Transform) can be executed on-line on a number of sample variable in the range 1024 – 8192, exploiting multi-waterfall visualization with scroll bars and zoom in synchronous mode. Thanks to complex algorithms for signal re-sampling and filtering, **GLE/WPS** enables users to visualize many frequency bands at the same time, with different amplitudes and center frequency in the range 20÷10000 Hz, ensuring the same resolution (up to 0.004 Hz) independently from the selected bandwidth.

GLE/WPS offers several visualization and analysis options, including the possibility to use in each window up to 10 families of cursors, each of them characterized by an identification icon. The order tracking can be performed in triggered and synchronous mode with harmonics up to the 400th order.

Acquired data can be saved to file and then post-processed or re-played at 2x, 4x and 8x speed.

GLE/WPS is particularly suitable to be used in combination with **Heim-Systems DATA-Rec-A, D and GSR** multi-channel recorders, which are designed for a broad variety of naval applications (ships, sonar, acoustic buoys...).

GLE/WPS