VIVAX METROTECH

HL6000X™-PC Correlator

Reliable

Fast Results

Process Integration

High-End Technology

Raising the Bar with Vivax-Metrotech's HL6000X™-PC Correlator

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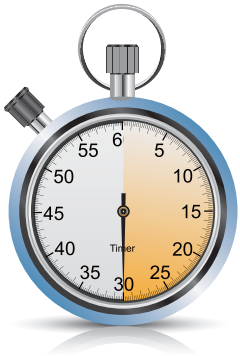
RELIABLE | FAST RESULTS | PROCESS INTEGRATION | HIGH-END TECHNOLOGY

The HL6000X-PC Correlator is a PC-based correlator system for pinpointing leaks in water pipes. The latest, most sophisticated correlation method helps the user save time and avoid expensive unnecessary digging.

Automatic tests make measurements even more reliable. The integrated reporting and mapping program means leaks can be easily recorded in detail.

The HL6000X-PC Correlator allows you to quickly and efficiently locate leaks in pipes of any material; with its innovative automated frequency analysis, plus manual override, it is the perfect correlator for anyone looking for leaks.

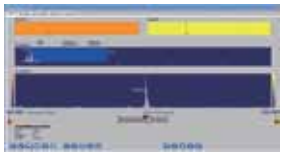


High-End Technology

The Measurement Quality Factor

This automatically calculated factor gives you even more certainty in the correlation results. The HL6000X-PC Correlator statistically analyzes the measurement and graphically displays how reliable it is.

Masking Sound



Concentrate on the essentials. Peak-suppression cuts out noise from the correlation curve. Taps turned on or other noise sources can be easily masked.

State-Of-The-Art User Interface

The attractive user interface of the HL6000X-PC Correlator is a highlight in itself. Naturally, it is also functional: the signal strength, coherence and individual signal spectra are all clearly shown beside the correlation function in the user's field of vision. You can alter the appearance of the user interface with just a few clicks to customize it as required.

Fast, Reliable Measurement – The Number One Priority

The first measurement - known as the overview measurement - tells you if there is a leak in the pipe section. Only then do you enter the pipe data. If this does not match the measured data, the system tells you straightaway to avoid possible false measurements, speed up and simplify the process of leak location. The HL6000X-PC Correlator also constantly monitors measurement results and signal quality. If there are any irregularities, it tells you immediately and suggests action to improve the measurement.

Automatic Filter Analysis

Which filter settings are the best? The HL6000X-PC Correlator answers this question using automatic filter analysis. After the analysis, it suggests a particular filter setting to achieve the best result. If you want to set your own filters, such as cutting out a 60Hz frequency of a nearby electrical substation, you can do this by simply clicking your mouse.

Multi-Correlation

You can only tell how accurate a reading is after a test correlation at another measuring point. To do this, a transmitter is moved and another measurement is carried out. With multi-correlation, these two measurement curves - or as many saved measurements as you like - are clearly shown together for comparison.

Reduce water loss faster...

3D Correlation Analysis

Is the measured noise constant? Is there noise interference in the pipe section? Often, intermittent ambient noise, such as taps turned on, masks the noise of the leak. The 3D analysis enables you to observe measurement results over a lengthy period of time. Peaks, which change during the measuring period, are unlikely to be leaks. This guides you accurately to the leak.

Speed Measurement

If you do not know the pipe data, you can carry out automatic speed measurements with the HL6000X-PC Correlator. It guides you through a menu so that you can quickly and easily find the correct pipe data.

Innovative Graphical Documentation Options

The integrated sketch program allows you to record your measurements in detail. Connected to an additional GPS antenna, the HL6000X-PC Correlator registers geographical coordinates and saves them. The data can be recalled later to assign measurements in GIS systems for further graphical documentation. Naturally, you can record leak noise and save it later. This means you can re-correlate at any time.

System Components – State-Of-The-Art and Powerful

The software for the HL6000X-PC Correlator runs on Microsoft Windows based PCs and notebooks. State-of-the-art computing routines and display methods make it easier to locate leaks.

Reliable

Transmitters and Microphones

Sophisticated, rugged and proven in the field, the Vivax-Metrotech TX A / TX B transmitters are characterized by their powerful performance over long ranges, their fast suppression of ambient noise and their rugged design. To record the leak noise, you can use either highly sensitive piezo electronic microphones or hydrophones. The latter are particularly suitable for plastic pipes and for long distances.

Features at a glance...

Reliable, Fast Results from Automation

- Automatic filter setting by multiple frequency noise analysis
- Automatic overview measurement
- Multi-position correlation results comparison
- Off-site correlation with saved data
- 3D time-line correlation analysis
- Manual override settings

Process Integration

- Integrated positioning with GPS antenna
- Optimized for working with tablet and rugged PCs
- Powered via USB connection
- Menu guided operation
- Integrated sketch program

High-End Technology

- Sophisticated radio technology for long-range operation
- Audio channel can be selected for listening to leak noises
- Digital Signal Processing

Compact and Light – The HL6000X™ PC E-Box-2

The HL6000X-PC E-Box-2 is easy to carry when making correlation measurements in the field. The E-Box-2 is powered entirely by the PC via its USB port. Additional batteries are not required. Headphones are connected directly to the E-Box-2 so that you can listen for the clear leak sound signals sent by the transmitters. By selecting the audio channel on the E-Box-2, you can also listen to both channels separately.

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Technical Specification

HL6000X™-PC Correlator

PC/Notebook	> 1 GHz CPU > 512 MB RAM > 20 GB hard disk USB 2.0 Windows 98 and higher
Power Supply For E-Box-2	Via USB
External Connectors	Aerial, headphones (PC), USB
Operating Temperature (without PC)	-4°F to 122°F *(-20°C to 50°C)*
Dimensions	3.94in (L) x 5.91in (W) x 1.57in (H) *(100mm x 150mm x 40mm)*
Weight (without PC)	0.88lbs *(0.4kg)*

TX A / TX B Transmitters

Display Type	LCD, 2 x 16 characters
Information Displayed	Battery status, noise level, equipment status
Buttons	Radio on/off, illumination on/off, volume control
Transmitted Power	< 500mW
Battery Life	Operation Time: > 15hours Charging Time: < 3hours
Power Supply	Internal Ni-MH battery, external 12V DC (car adapter) or 110V AC
External Connectors	Sensor/hydrophone connection, aerial, headphones/charger
Protection Class	IP67 when operating
Operating Temperature	-4°F to 122°F *(-20°C to 50°C)*
Dimensions	7in (L) x 5in (W) x 7.5in (H) *(180mm x 130mm x 185mm)*
Weight	4.6lbs *(2kg)*

PAM CORR-2 Sensors

Sensors	Piezo sensor with active amplifier
Connection Cable	Highly flexible silicone cable
Adapter	Magnetic Adapter
Operating Temperature	-4°F to 122°F *(-20°C to 50°C)*
Dimensions	3.07in (Dia.) x 3.54in (L) *(78mm x 90mm)*
Weight	0.88lbs *(0.4kg)*

Contents

- HL6000X-PC E-Box-2
- HL6000X-PC Correlator software
- TX A and TX B transmitters, each with active piezo sensor
- Noise cancellation headphones
- Charging case for carrying the transmitters
- USB cable
- Wall charger for transmitters
- 12V three way charger lead with distributor lead
- Roof antenna with magnetic base

Available Accessories

- Hydrophones (PAMHYDRO-2)
- HL6000X Mobile Commander
- Pipe and Valve Adapter

Recommended PC Notebook

- Toughbook
- Minimum PC Operating System Requirement - Windows 98 and higher

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