ERBESSD RELIABILITY™

EIMU | REAL-TIME MONITORING UNIT

Real-Time Monitoring Unit

Your machinery condition. Anytime, Anywhere.

Only for illustrative purposes.

Overview

EIMU is the easiest to deploy, modular, machinery condition surviellance system available on the market. Now you can easily, and cost effectively monitor all of your rotating assets from anywhere, anytime...

With continuous monitoring you can minimize constant operator monitoring. All data collected is sent continuously through WiFi or intranet/internet to the DigivbeMX server, and this information can be sent, and processed any time from anywhere in the world.

Features & Advantages

- Low cost
- Real time measurements
- Remote analysis from anywhere* in the world
- Ideal for difficult to access machines
- Easy to install & compact design
- Free software with a friendly interface
- Low energy consumption
- Programmable alarms
- Unbeatable training & support

Access to all your data, when need it.

How does it work?

Each **EIMU®** records 2 simultaneous channels (of the 12 available) and sends the information through the net (intranet or internet) to a server where it's stored. Once the data is saved, the EIMU switches to the next 2 channels and records them doing the same process until completing the whole sequence.

The data stored in the server's database is converted to the DigivibeMX file format for analysis. At the same time this data can be uploaded to a database on the net and can be analyzed in real time from anywhere in the world through our website www.eianalytic.com.

Database

EIMU works with a MySQL database and all data can be exported to different types of databases (SQL, MS Access, etc.) to meet the needs of a website or other type of server. Erbessd Instruments has created a specific website called EI Analytic that allows the user to remotely access this data and thus determine the condition of the machinery in real time from anywhere in the World.

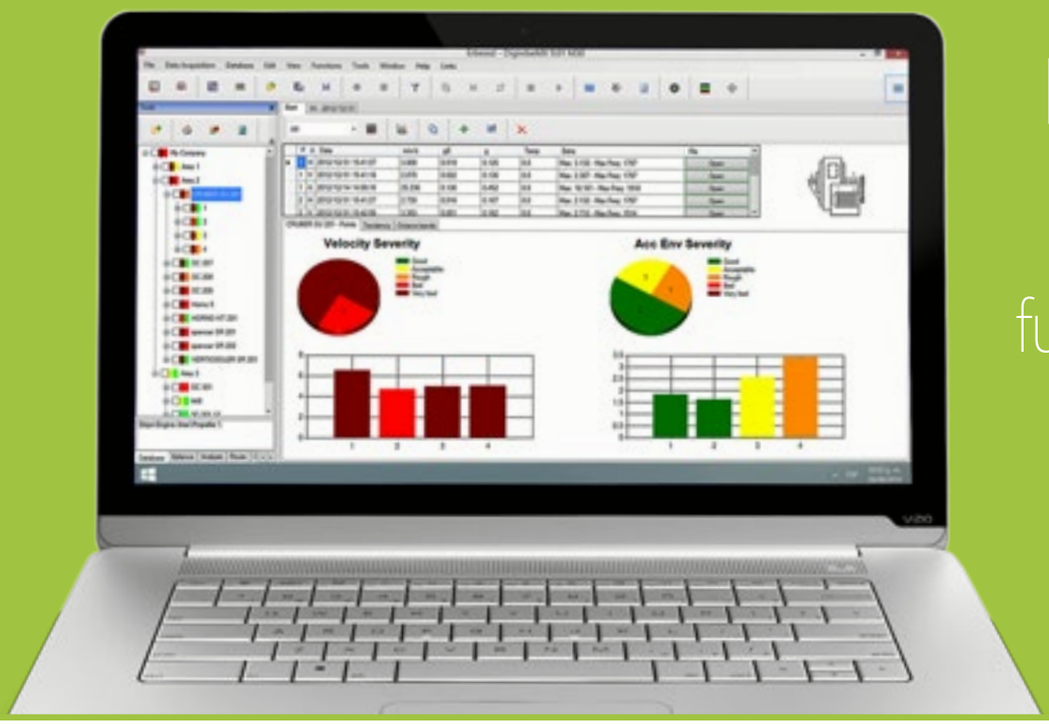
Remote, but not so far...

What do you need to use EIMU System?

When you purchase the EIMU System, you just install the software on your server computer (you can get help from manuals and our video tutorials). The server computer should always be connected to a defined network via a gateway router. The router should connect all EIMU's together wirelessly or through ethernet cable or through other routers connected on the same network.

Easy to install, easy to use

Just mount it on a surface close to the machine and install the accelerometers on the machine where you want to monitor. Plug int the network cable or the configure the WiFi connection to configure each EIMU®. Many EIMUs can be added to the same monitoring network. The software for Analysis and Monitoring is DigivibeMX for EIMU. It has many features that allow you to analyze the recorded signals from the EIMU System. The data collected from a traditional route in field can also be analyzed with same software keeping it familiar to your technicians.

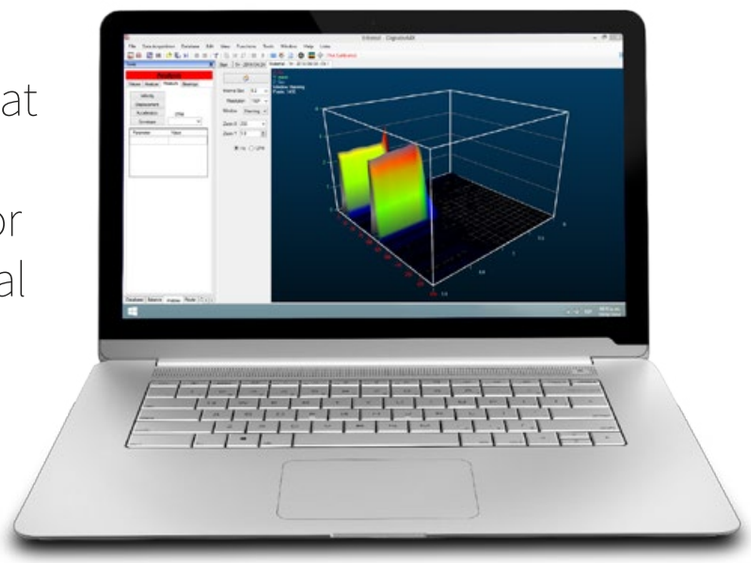


Functions &Tools

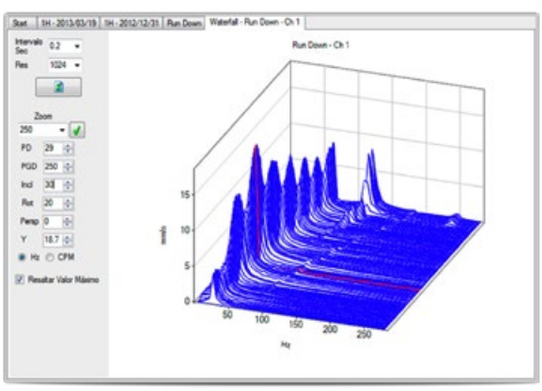
It's advanced functions allow you to make informed decisions anytime... anywhere...

Real 3D Waterfall

A waterfall is a time-varying spectral representation (forming a 3D plot) that shows how the spectral density of a signal varies in time. In DigivibeMX For EIMU you can now enjoy the new Real 3D waterfall tool which can be easily created and rotated when dragging the mouse over the graph like in common 3D software.



FFT Spectra

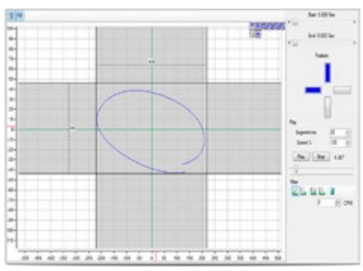


Most spectral tools in DigivibeMX for EIMU are based on the FFT algorithm, capable of measuring low frequencies (1 Hz) up to 10 kHz. The accuracy of the spectrum varies according to the needs, reaching many million of resolution lines.

- **1 Million LOR**
- **3D spectra**
- **Onboard Analytics**

Dual Channel Functions

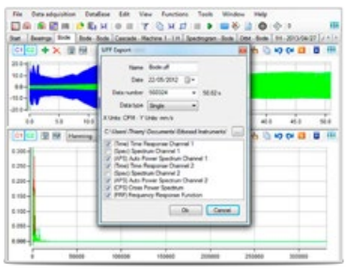
Dual channel analysis has huge advantages, not only because it saves time data collection, but also because it allows you to obtain information that could not be acquired with a single channel. For example: Orbits, run down analysis to analyze critical frequencies, crosschannel phase and more...



- **Orbit analysis**
- **Cross Power**
- Spectrum
- **Frequency Response** Function
- **Coherence** Function

Compatibility

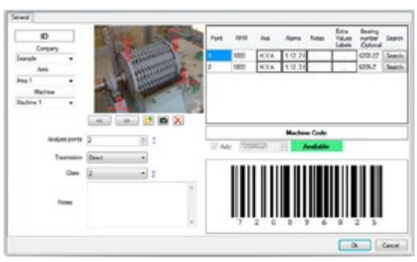
DigivibeMX for EIMU can export to 3 universal formats: WAV (audio), ASCII and universal file format UFF58.



- ASCII files
- UFF58 files
- ANL BAL files

Machinery Database

DigivibeMX for EIMU allows you to save all your machines features in order to make route analysis.

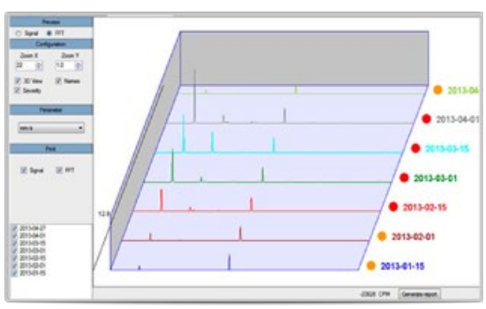


- Name, Area& Company
- Measurement Points
- Coupling joint
- ISO Class

Bearings Database & Automatic Reports

DigivibeMX for EIMU has an expandable database with information about more than 20,000 bearings. Also, it's able to generate automatic reports in Microsoft Word format, this way it is easy to add necessary information or remove useless data.

Predictive Analysis Tools



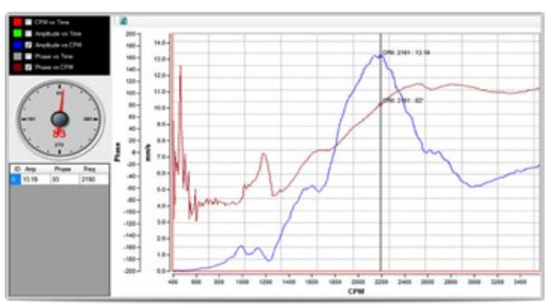
DigivibeMX for EIMU allows the user to perform predictive analysis of any machine located in the Machines Database.

- **Machines database and routes**
- **+ 20,000 bearings database with dimensions**
- **Speed Interpretation and intelligent diagnostic tools**
- **Cascade spectra**

Advanced Analysis Functions

The advanced vibration analysis features allow the diagnosis of complex failures, relation between points, vibration modes and structure analysis.

- **Crest Factor**
- **BODE Diagram**
- **RPM vs Time**
- **Amplitude vs Time**
- **Bump Test**



ODS **Analysis** is now an easy task

Technical Information

Channels	12
Channels recorded simultaneously	2
Recording length	1-9 sec
Sample Rate	44100 Hz (covers all the accelerometer range from 0.4 Hz to 13 kHz)
Recording Cycle Times	30 sec- 24 hrs
Types of recording types	Tendency (only numerical values) and Analysis (full signal)
Recoding Modes	Dual channel (H-V, A-A): Orbits Phase Analysis (reference point): ODS, Bode, Nyquist, Balancing
Maximum number of recordings	All necessary routes while the command list is not overflowed (a red flag shows up in the server desktop when this situation occurs)
Storage capacity	EIMU doesn't store, the signals are sent integrally to the server once they are recorded so they are available immediately. It doesn't transmit permanentely
Data Transfer	TCP/IP Wireless / Ethernet
Type of sensors	Accelerometer Velocimeter Proximeter Tachometer
Axes	Monoaxial (Default) Triaxial (Optional)
Powered sensors (switch ON)	18 - 30V 2 - 8mA
Non powered sensors (switch OFF)	Analogic input: 0 - 3 VAC
Maximum cable length	100 m (Check sensor specs)
Electrical specs	Input: 117/230 V 50 ~ 60 Hz - 1A Output: 9/18 VDC - 2A

ERBESSD RELIABILITY™

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