DSP Logger Expert®

Precision, sturdiness and versatility all in one

Vibration Measurement
AC/DC measurements
Vibration Analyzer
Data Collection
Phase Analysis
Machine Balancing
Multichannel Expert Analyzer
Continous Monitoring Function
Human Body Vibration Analysis
Motor Current Signature Analysis

USB 2.0

IP65

6 (SIX) SIMULTANEOUS CHANNELS

Two triaxial sensors working simultaneously

DSP Logger Expert

Advanced 6CH Vibration Analyzer

The DSP Logger Expert is a data collector, multichannel, FFT Analyzer made for Predictive Maintenance and machine diagnostics.

The instrument can measure, process, show and store a wide variety of analysis modes. It can work as standalone or you can download the measurements your PC via its software.

Customers in Latin America already have been relying on the cost/benefit relationship of these units for over 30 years, as well as 700 units of it's predecessor, the DSP Logger MX300.

This new unit has a 640 x 480 resolution screen, 5" color display and High Contrast, to better handle direct sun light, It also has a sturdy keyboard with easy to find keys and four dedicated function keys in each mode of operation.

Now you can measure spectrum from 400 up to 25,600 lines and wave forms from 512 up to 16,384 samples; capturing acceleration, velocity, displacement and envelope, both AC and DC.

Main Applications:

Vibration Measurement

Bearing Measurement
- Bearing Condition
- Lubrication
- High Peaks
- Trending

Spike Energy®
- Amplitude by failure frequencies
- Spike Energy® State
- Trend

ISO 10816 Measurement
- ISO 10816 Status
- Balancing Status
- Alignment Status
- Looseness Status
- Trend

Dual Channel
- Bearing Condition
- Mechanical, ISO Condition
- Dual channel recording Function

Vibration Analyzer

Preconfigured Spectral Measurement
- Velocity
- Displacement
- Acceleration
- Envelope

Configurable Spectrum Measurements
- With Accelerometers
- With proximiters
- With Velocimeters
- AC

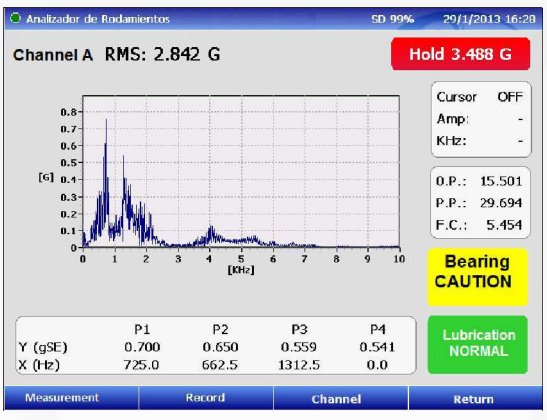
Triaxial Spectral Measurements

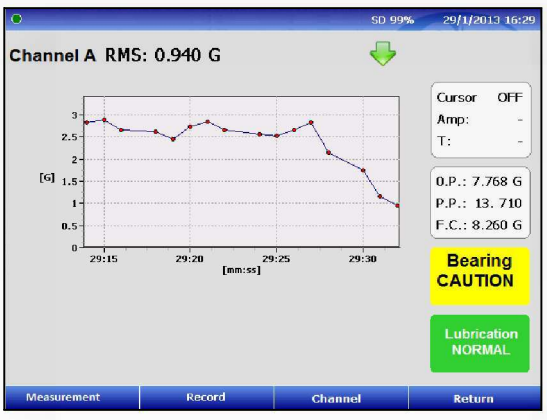
Dual Channel Scalar Measurements

Scalar Multivariable Measurement

Tachometer RPM Measurement

Mechanical Status Tools
- ISO 10816 Status
- Balancing Status
- Alignment Status
- Looseness Status





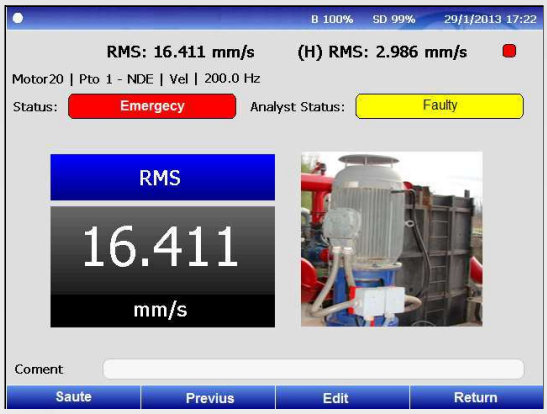
DSP Logger Expert

Advanced 6CH Vibration Analyzer

Main Applications:

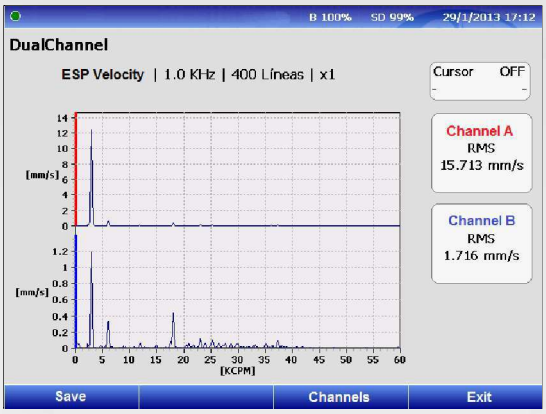
Data Collector

Multilocation polling
Route-equipment-point-measurement
Route visualization tools
Route regeneration of unmeasured points
Route history, including last 5 captures
Mechanical status tools
Equipment diagram
Equipment pictures
Automated function: quick or detailed
Alarm system in spectrum or scalar
Manual measurement status system



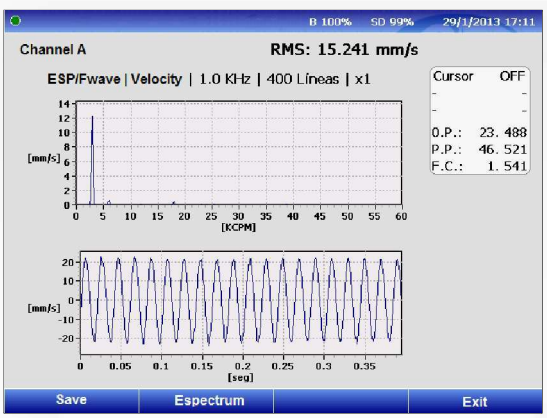
Machine Balancing

Single Plane Balancing
Dual Plane Balancing
No-Phase Balancing
Dual Channel spectrum
Calculations to add or subtract weight
Final Correction Report
Report Generator



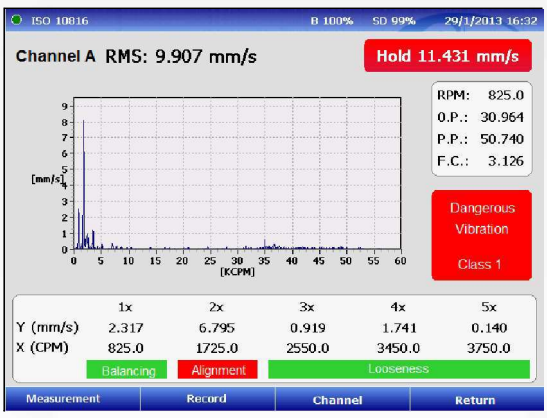
Vibration Phase Analysis

Relative Phase Measurement
Absolute Phase Measurement
Samples to measure and position sensors
Includes:
Polar Graph
Phase Trend
Dual Channel WaveForm



Expert Analysis

Multichannel Spectrum Measurement
Electrical Rotor Analysis
Bode Graphics
Bump Test
Orbital Function with or without filtering
Configurable Spectrum cascade
Crossreference Spectrum
Programable Condition Monitor Function
Human Body vibration measurement



DSP Logger Expert

Advanced 6CH Vibration Analyzer

Technical Specifications

Input channels: six

Input sources: Acceleration, AC/DC sensors

Amplitude accuracy: 1%

Resolution: Programmable 400, 800, 1600, 3200, 6400, or 25600 lines

Measurement windows: Hanning, Flat top, Rectangular

Preprocessing gSE and ESP enveloping (demodulator) with four selectable input filters for enhanced bearing and gear mesh fault detection

Digital Integration:
Velocity and Displacement, with high-pass filters
Programmable 1%, 5% and 10% of Fmax
filters:
1.25... 2.5 KHz
2.5..... 5 KHz
5 .....10 KHz

Frequency range: 0.2Hz to 20Khz
Low-frequency cutoff 0.18…70 Hz

Memory: Internal RAM 256 MB
MicroSD: 8GB

Trigger modes: Trigger: External or Laser Tach
Trigger Level: Fixed or Automatic
Ext Trig Slope: Amplitude and Slope

USB Communication

Data Displays six-channel spectrum, six-channel time, phase table, orbit, process, cross channel phase, dual spectrum, time plots, and two tri-axial plots

Averaging Programmable from 1…4096
Spectral, synchronous time, peak hold, and continuous

Display: LCD, backlit color
VGA (640 x 480) 5.7 ¨ viewable area

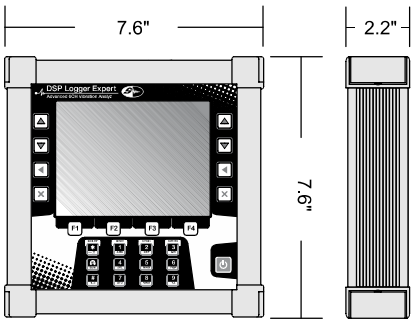
Casing: IP 65/DIN EN 60529 Aluminium

Input connectors:
Connector A and Connector B are 5-pin AMPHENOL
Connector A: Channel 1, 3 and 5
Connector B: Channel 2, 4 and 6

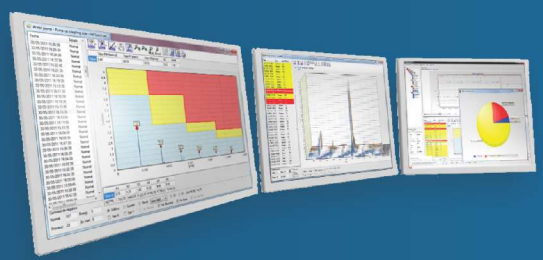
Microprocessor nvidia dual core de 1Ghz
DSP processor Analog Devices

Battery: Rechargeable lithium ion

Weight, approx. 715 g (1.52 lb)



DPS Machinery Control analysis and control system



The DSP Machinery Control software is designed for the measurements organization and visualization in a simple manner determining the state of each machine.
It holds a vast quantity of diagnostic tools that ensures the early detection of mechanical and electrical flaws.
All our field meters and analyzers, are completely compatible with this software, allowing to operate all measurements via a single database.

Compatible equipments

www.semapi.com

SEMAPI Central
Las Heras 419
Campana (B2804GTC)
Bs. As., Argentina
Tel: (54) 03489-431111
Fax: (54) 03489-426661
ventas@semapi.com.ar

SUS ENGINEERING LLC
4861 n Dixie Hwy suite 207
Oakland Park,FL. 33334
USA
(786)-236-5593
usa@semapi.com

SUS ENGINEERING North
315 S 40th St
Boulder, CO 80305
USA
Ph/What's App:
+1(720)998-1133
sales@semapi.com

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Management System ISO 9001:2015
www.tuv.com ID 9105060235