



Vibration analyzer ADL MS30

ADL MS30 – vibration measurement and analysis on one channel, plus rotational speed and non-contact temperature measurement.

ADL MS30 is a device designed for measuring and analysing vibration in equipment. The device can measure and analyse vibration on one channel, allowing for an accurate determination of the causes of vibration and how to eliminate them.

ADL MS30 also provides the ability to measure the rotational speed of the equipment; an important diagnostic tool.

The device is also equipped with a non-contact temperature measurement function, for rapid monitoring and the prevention of overheating.

This unit is a simple and reliable tool; the built-in software allows for easy data management and report generation, making the equipment monitoring process very straightforward.

Operation is quick and requires no preparatory work.

One of the important features of the vibrometer is the ability to forecast vibration increase based on measured values over a certain period of time, such as a month. This allows for scheduled repairs or overhaul – significantly cheaper than an unforeseen breakdown.

All these functions and capabilities make this vibrometer a very useful and necessary tool for monitoring the condition of equipment in various industrial sectors where it is critically important to avoid unplanned breakdowns.

The values measured by the analyser can be used to diagnose machinery defects by spectral analysis, where the key and "defective" lines in the vibration spectrum can be detected. This allows you to determine the condition of bearings, and detect imbalance, misalignment and other defects.

Spectral analysis is a signal analysis method in which the signal is broken down into frequency components, allowing the identification of individual frequency components that make up the vibration. The presence of key and defective lines on the spectrum allows determining the condition of equipment and diagnosing possible defects. For example, if key and defective lines corresponding to bearings are found on the vibration spectrum, this may indicate their wear or malfunction. Similarly, the presence of lines corresponding to imbalance or misalignment may indicate these defects in the equipment.

The main application is real-time operational monitoring for the detection of deterioration in numerous equipments, for example bearings, gears, turbines, generators, fans, pumps, rotors, ball mills, rolling mills, reducers, conveyors, engines, blowers, and many other types of equipment. They are applicable for monitoring both entire machines and individual components.

ADL MS series vibration analysers are used in mechanical engineering, aerospace and transport, thermal and nuclear power engineering and agricultural engineering, among many others.

Features and functions of the device:

- Measurement of vibration velocity, vibration displacement and vibration acceleration;
- Non-contact temperature measurement;
- Optical tachometer for measuring rotational speed;
- Spectral vibration analysis (fast Fourier transform);
- Analysis of the time signal;
- Display of RMS and peak vibration values;
- Measurement in the acceleration/run-out mode;
- Facility to obtain vibration-change trends;
- Built-in battery;
- Easy and intuitive control;
- Dust and moisture-proof design of the keyboard, display and connectors;
- Bright display.

Introduction ADL series vibration meters at enterprises will allow:

- significantly increased reliability and service life of equipment,
- greatly reduced risk of emergencies and/or unforeseen breakdowns,
- timely detection of equipment deterioration
- increase profits by reducing the cost of unforeseen repairs and downtime.

TECHNICAL SPECIFICATIONS

Parameter	Values
ADL MS30	
Number of vibration channels	1
Speed sensor channels	+
Measure temperature	+
Frequency range	1...10000 Hz
Vibration acceleration measurement range	up to 200 m/s ²
Vibration velocity measurement range	up to 200 mm/s
Displacement measurement range (peak-to-peak)	up to 2000 μm
Accuracy	up to 5%
Possibility of balancing	-
Temperature measuring range	-70...+380°C
Speed measuring range	10...200000 rpm
FFT spectral analysis	400, 800, 1600 lines in the spectrum
Memory	4 GB
PC connection and charging	USB
Display	color, 128x160 pixels
Battery	Built-in, LiPol
Terms of Use	from 0°C to 50°C humidity up to 80%
Overall dimensions	132 x 70 x 33mm
Weight	150

DELIVERY SET

№	Name	Qty.
1	ADL MS display unit	1
2	Accelerometer (vibration probe)	1
3	Cable 1.5m to a vibration probe	1
4	A Magnet for mounting the vibration sensor	1
5	Universal, combined speed and temperature sensor with magnetic stand	1

6	AC USB charger	1
7	USB cable	1
8	USB flash drive with software (or installed in the built-in memory of the device)	1
9	Manual	1
10	Protective case	1
11	Carrying and storage bag	1