



Vibration analyzer with laser alignment function ADLMS54Pro

ADL MS54 - 4 channel vibration analyzer

This analyser has many functions for expert monitoring of vibrations and diagnosing the causes of excess vibration. The ADL MS54Pro model includes the ability to accurately, easily and quickly perform laser shaft alignment.

The vibration analyser is designed to measure general vibration parameters, the vibration spectrum of rotating equipment, evaluate according to ISO 10816, monitor the status of measurements and collect data for subsequent diagnostics and adjustments to equipment.

Features of vibration meter:

- Balancing - up to 8 correction planes (16 measurement points)
- 4 channels for measuring and evaluating the vibration spectrum
- Classic reliable piezo accelerometers
- Wide frequency range for high quality and professional diagnostics
- Easy and precise shaft alignment
- Distance between sensors on alignment equipment - up to 10m
- Shaft diameter range 20 to 250 mm diameter with supplied chains
- Ultralight wireless laser sensors with built-in Bluetooth for alignment.
- Wide range of features including horizontal and vertical machine alignment, gasket simulator and thermal expansion calculation
- Preparation of reports in PDF format and other
- Large capacity flash drive for storing measurements and reports
- USB interface for PC connection
- High-capacity battery
- Measurement archiving and reporting software
- Intuitive interface
- Bright and color display.

The main field of application of the device is the operational monitoring of the mechanical condition of equipment: e.g. bearings, gears, turbines, generators, fans, pumps, rotors, rolling mills, gearboxes, conveyors, engines, blowers and many other equipments. Vibration analysers of the ADL MS series are suitable for monitoring both entire structures and individual elements.

The vibration analysers of the ADL MS series are used in metallurgy, mechanical engineering, petrochemical, light and defense industries, thermal and nuclear power engineering, maintenance of agricultural equipment, housing and communal services and transport among other industries.

Technical specifications

Parameter	Values
Analyzer	ADL MS54Pro
Number of vibration channels	4
Frequency range	1 ... 25000 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%
Rotation frequency measurement range	10...200000 rpm
FFT spectral analysis	100, 200, 400, 800, 1600, 3200, 6400, 12800, 25600, 51200, 102400 lines in the spectrum
Balancing	
up to 8 correction planes, up to 16 measurement points	
Shaft alignment function	
Shaft diameter range	Diameter 20 to 250 mm (0.8 to 10 inches) with supplied chains
Laser type	Diode laser
Laser wavelength	650 – 675 nm
Laser safety class	2
Maximum laser power	1 mW
Distance between measuring units	Min: 70mm Max: 10m
Electronic inclinometer	Accuracy ±0.1°
Connection	Built-in Class 1 wireless (up to 100m)
Sensor dimensions (laser alignment)	91x57x42 mm
Sensor weight (laser alignment)	125 g
General parameters of the device	
Display	Color VGA
Memory	8 GB
PC connection and charging	USB
Battery	Li-Pol, 8 hours of continuous work
Case protection	IP54
Accelerometer protection	IP68
Work Conditions	Temperature: -20 to +55°C; humidity: up to 90%
Dimensions	220 x 102 x 40 mm
Weight	470

DELIVERY SET

№	Name	Qty.
1	Display unit ADL MS54Pro	1
2	Accelerometer (vibration probe)	4
3	Cable 1.5m to a vibration probe	4
4	Magnet for mounting the vibration probe	4
5	Optical probe with magnetic stand	1
6	Wireless sensors for laser alignment	2
7	Universal V-brackets with chains for attaching laser alignment sensors	2
8	Racks 100mm	2
9	Racks 150mm	2
10	AC USB charger	1
11	USB cable	1
12	Software on a flash drive (or installed in the built-in memory of the device)	1
13	Roulette 3m	1
14	Carrying and storage bag	1
15	Protective case	1
16	Manual	1
17	Warranty card	1