

A4300 VA3 Pro

3-CHANNEL, HIGH SPEED ANALYZER, DATA COLLECTOR ...



The A4300 VA3 Pro is the newest addition to our range of portable devices for vibration diagnostics.

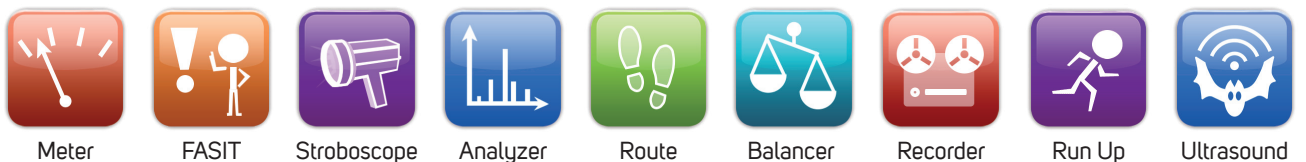
There are 2 signal inputs and 1 tachometer/trigger input. Input 2 offers connectivity to a triaxial sensor, therefore all 3 channels can be measured simultaneously. The expert system developed by Adash can automatically detect machine faults such as unbalance, looseness, misalignment and bearing faults.

There is a non-contact IR temperature sensor (for immediate bearing temperature measurement) and a LED stroboscope/torch. The A4300 VA3 Pro is designed for one-handed operation. With a weight of just 780g and a battery life of more than 10 hours of operation, the unit is suitable for long route measurements.

The A4300 VA3 Pro instrument can be configured according to your requirements by choosing optional modules: analyzer, route, balancer, recorder, run up or ultrasound. Optional modules can be purchased also additionally and downloaded to the instrument without the need of sending it back to the factory.

- > Low weight 780 g
- > Long lasting battery
- > Ideal for route measurement
- > Route compatibility with VA4 Pro

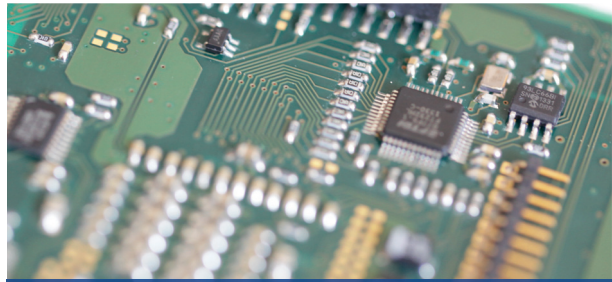
+ Includes stroboscope and torch
Instrument firmware updates free of charge from Adash website





DATA PROCESSING

- › Real time FFT
- › DEMOD - ENVELOPE analysis
- › ACMT - low speed bearing analysis
- › Order analysis
- › User band pass analysis
- › RPM measurement
- › DC measurement
- › Orbit measurement



A/D CONVERSION

- › 24 Bit A/D conversion
- › 64 Bit signal processing
- › 120 dB dynamic range
- › No Auto-Gain



IDEAL FOR ROUTE MEASUREMENT

- › Heavy-Duty aluminium case
- › Removable Li-Ion battery pack
- › More than 10 hours of operation
- › Colour display 240 x 320 px
- › FFT resolution: 25600 lines
- › Route memory: 8GB



TOP PANEL

- › ACC ICP® - sensor input
- › 2 signal inputs AC/DC (IN1,IN2)
- › Input IN2 is ready for triaxial sensor (3 simultaneous channels)
- › Input for tachometer/trigger
- › IR non-contact temperature sensor
- › LED stroboscope/torch
- › Mini USB for data transfer




ACCESSORIES

- › Accessories can be selected under your requirements
- › Silicone protection cover protects the device (see our video how we perform drop test on adash.com)
- › Hard-shell transport case

A4300 VA3 PRO MEASUREMENTS MODULES

METER



11:05

CH1, 25 Hz Manual, Alarms: default


3.1 [mm/s] RMS
7.8 [mm/s] True 0-P

0.49 [g] RMS
0.70 [g] True 0-P

Stop

- Overall Vibration Values (RMS, 0-PEAK)
- FFT Spectrum
- Time Signal
- Frequency Bands
- Displacement
- Temperature

FASIT - EXPERT SYSTEM



07:48


CH1: 0.109 in/s; 0.49 g
25.0 Hz Auto

Automatic detection of possible machine faults:


- Unbalance
- Misalignment
- Looseness
- Bearing faults

Stop

STROBOSCOPE



14:25




1486.0 RPM
24.77 Hz

Back Menu Start

Switch on the stroboscope to visually "freeze" the machine movement and check its rotating parts. Speed of the machine can also be detected.

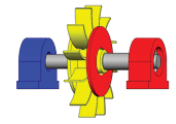
BALANCER



12:47

/balancing01 - Run 2
Measurement with trial


Trial [g]: 45
Amplitude [mm/s RMS]: 19.0
Phase [°]: +145
Speed [RPM]: 1500
DFA: 501
DFP [°]: +179



Back Menu Start

Balancer allows you to perform one or two plane balancing job of rotating parts such as industrial fans, blowers, spindles etc.

ANALYZER



13:33

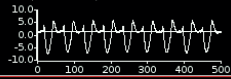
/Meas01

4/4 select done

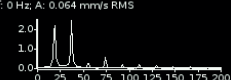
RMS 3.68 mm/s 1/1-Hz

RMS 0.074 g 1/1-Hz

TIME t: 0 ms; Y: 1.23 mm/s 1/1-Hz



SPEC f: 0 Hz; A: 0.064 mm/s RMS 4/4-Hz



Back Menu Start/S

Select the type of the measurement (from simple overall values through FFTs and time signals to more advanced measurements with Proximity probes such as Orbits), set up the measurement settings according to your requirements (frequency range, sampling, units etc.) and take all the predefined measurements simultaneously (up to 3 channels).





ROUTE

13:43

- /Route P1
 - ✓Plant1/Unit1/Pump1
 - ✓Plant1/Unit1/Pump2
 - ✓Plant1/Unit2/Motor1
 - ✓Plant1/Unit2/Motor2
 - Plant1/Unit3/Fan1
 - Plant1/Unit3/Fan2
 - Plant1/Unit4/Pump1
 - Plant1/Unit4/Pump2
 - Plant1/Unit5/Pump1
 - Plant1/Unit5/Pump2
 - Plant1/Unit6/Fan1
 - Plant1/Unit6/Fan2

Back Menu Ok

Route module is used for day to day data collection of your factory machinery. Simply create your route tree and take the measurements regularly.

RUN UP

09:07

/Trial
1/1 trend 27.07.2016 15:14:14
APS 1/1:8.56Hz

A: 2.70 mm/s RMS

P: -494°

S: 8.56 Hz

27.07.2016 15:14:03 27.07.2016 15:14:14

Back Menu

Similar to Analyzer mode where you can setup any measurement which you like. Run Up allows you to control the saving of data for example as soon as possible, by speed change, time change etc.

RECORDER

11:15

/rec done

Time: 03.06.2016 11:14:54
Length: 00:00:21
Fs [Hz]: 65536
AC1: 100 mV / g
AC2: off
AC3: off
DC1: off
DC2: off
DC3: off
Tacho: on
AC1: (-4.00; 4.00) g

Back Menu Start

Recorder mode "records" the raw signal from the sensor (it means raw signal from the machine.) This allows you to make a post processing of the signal later on your PC.

ULTRASOUND

14:31

Level: 44 dB

Shock Factor: 18

Pa

Back Menu Start

Measurement of sound unhearable for human ear – ultrasound. Typical application is air leak detection, electrical arcing or early bearing fault detection.