



## YOUR BEST PARTNER FOR VIBRATION DIAGNOSTICS

VIBRATION DIAGNOSTICS TOOLS AND SOFTWARE  
MACHINERY CONDITION MONITORING  
PREDICTIVE MAINTENANCE SYSTEMS  
PORTABLE BALANCING TOOLS



MASTER THE LANGUAGE OF YOUR MACHINERY





## ABOUT ADASH

The only field of business of the Adash Company is the development and production of the instruments and software for machine vibration diagnostics.

Adash Company was established in 1991 and since the beginning it has been a private company owned by its two founders. During this time many similar companies have been acquired by larger corporations. They lose the ability to make their own decisions and direct customer support is dramatically decreased.

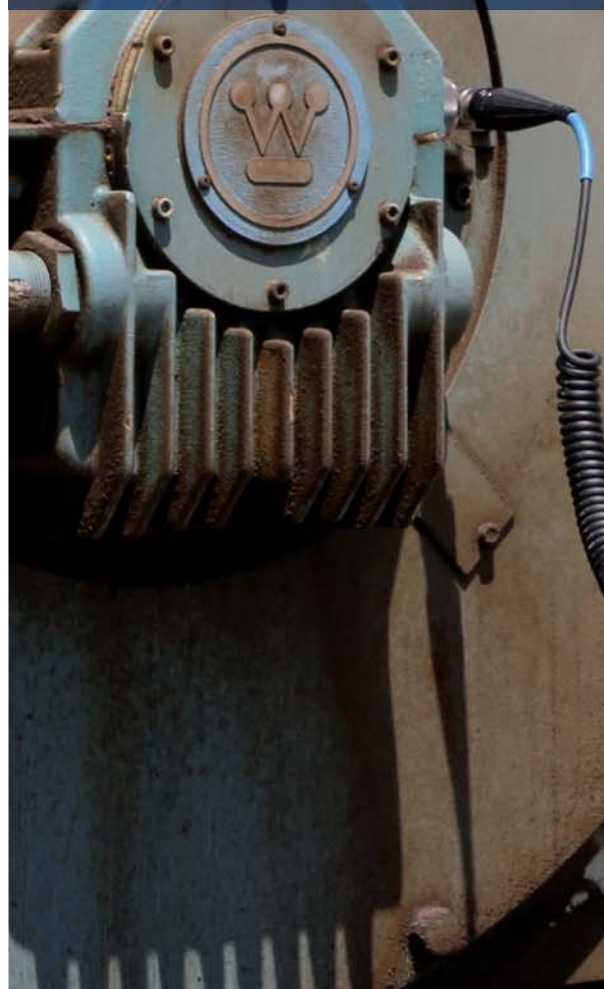
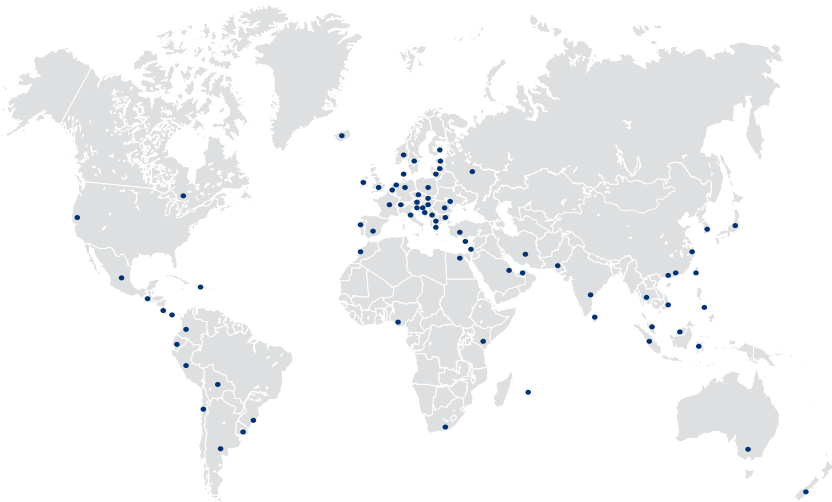
At Adash, we remain independent and this gives us many advantages. We openly listen to feedback from customers as it gives us an opportunity to improve our products. When you contact Adash, you will be assisted by the best qualified person to answer your questions, usually the engineer who developed the product. There is professional support coming straight from Adash.

# ADASH - VIBRATION DIAGNOSTICS TOOLS AND SOFTWARE SINCE 1991

### CERTIFICATES



WE EXPORT TO MORE THAN 80 COUNTRIES.







- › Manufacturer of vibration diagnostics tools
- › Development of vibration diagnostics software
- › Distribution network around the world



# Vibration Monitor

Ch 1      Ch 2      Ch 3      Ch 4

Ch 5      Ch 6      Ch 7      Ch 8

Ch 9      Ch 10      Ch 11      Ch 12

Ch 13      Ch 14      Ch 15      Ch 16

Ch 17      Ch 18      Ch 19      Ch 20

Ch 21      Ch 22      Ch 23      Ch 24

Ch 25      Ch 26      Ch 27      Ch 28

Ch 29      Ch 30      Ch 31      Ch 32

Ch 33      Ch 34      Ch 35      Ch 36

Ch 37      Ch 38      Ch 39      Ch 40

Ch 41      Ch 42      Ch 43      Ch 44

Ch 45      Ch 46      Ch 47      Ch 48

Ch 49      Ch 50      Ch 51      Ch 52

Ch 53      Ch 54      Ch 55      Ch 56

Ch 57      Ch 58      Ch 59      Ch 60

Ch 61      Ch 62      Ch 63      Ch 64

Ch 65      Ch 66      Ch 67      Ch 68

Ch 69      Ch 70      Ch 71      Ch 72

Ch 73      Ch 74      Ch 75      Ch 76

Ch 77      Ch 78      Ch 79      Ch 80

Ch 81      Ch 82      Ch 83      Ch 84

Ch 85      Ch 86      Ch 87      Ch 88

Ch 89      Ch 90      Ch 91      Ch 92

Ch 93      Ch 94      Ch 95      Ch 96

Ch 97      Ch 98      Ch 99      Ch 100

Ch 101      Ch 102      Ch 103      Ch 104

Ch 105      Ch 106      Ch 107      Ch 108

Ch 109      Ch 110      Ch 111      Ch 112

Ch 113      Ch 114      Ch 115      Ch 116

Ch 117      Ch 118      Ch 119      Ch 120

Ch 121      Ch 122      Ch 123      Ch 124

Ch 125      Ch 126      Ch 127      Ch 128

Ch 129      Ch 130      Ch 131      Ch 132

Ch 133      Ch 134      Ch 135      Ch 136

Ch 137      Ch 138      Ch 139      Ch 140

Ch 141      Ch 142      Ch 143      Ch 144

Ch 145      Ch 146      Ch 147      Ch 148

Ch 149      Ch 150      Ch 151      Ch 152

Ch 153      Ch 154      Ch 155      Ch 156

Ch 157      Ch 158      Ch 159      Ch 160

Ch 161      Ch 162      Ch 163      Ch 164

Ch 165      Ch 166      Ch 167      Ch 168

Ch 169      Ch 170      Ch 171      Ch 172

Ch 173      Ch 174      Ch 175      Ch 176

Ch 177      Ch 178      Ch 179      Ch 180

Ch 181      Ch 182      Ch 183      Ch 184

Ch 185      Ch 186      Ch 187      Ch 188

Ch 189      Ch 190      Ch 191      Ch 192

Ch 193      Ch 194      Ch 195      Ch 196

Ch 197      Ch 198      Ch 199      Ch 200

Ch 201      Ch 202      Ch 203      Ch 204

Ch 205      Ch 206      Ch 207      Ch 208

Ch 209      Ch 210      Ch 211      Ch 212

Ch 213      Ch 214      Ch 215      Ch 216

Ch 217      Ch 218      Ch 219      Ch 220

Ch 221      Ch 222      Ch 223      Ch 224

Ch 225      Ch 226      Ch 227      Ch 228

Ch 229      Ch 230      Ch 231      Ch 232

Ch 233      Ch 234      Ch 235      Ch 236

Ch 237      Ch 238      Ch 239      Ch 240

Ch 241      Ch 242      Ch 243      Ch 244

Ch 245      Ch 246      Ch 247      Ch 248

Ch 249      Ch 250      Ch 251      Ch 252

Ch 253      Ch 254      Ch 255      Ch 256

Ch 257      Ch 258      Ch 259      Ch 260

Ch 261      Ch 262      Ch 263      Ch 264

Ch 265      Ch 266      Ch 267      Ch 268

Ch 269      Ch 270      Ch 271      Ch 272

Ch 273      Ch 274      Ch 275      Ch 276

Ch 277      Ch 278      Ch 279      Ch 280

Ch 281      Ch 282      Ch 283      Ch 284

Ch 285      Ch 286      Ch 287      Ch 288

Ch 289      Ch 290      Ch 291      Ch 292

Ch 293      Ch 294      Ch 295      Ch 296

Ch 297      Ch 298      Ch 299      Ch 300

Ch 301      Ch 302      Ch 303      Ch 304

Ch 305      Ch 306      Ch 307      Ch 308

Ch 309      Ch 310      Ch 311      Ch 312

Ch 313      Ch 314      Ch 315      Ch 316

Ch 317      Ch 318      Ch 319      Ch 320

Ch 321      Ch 322      Ch 323      Ch 324

Ch 325      Ch 326      Ch 327      Ch 328

Ch 329      Ch 330      Ch 331      Ch 332

Ch 333      Ch 334      Ch 335      Ch 336

Ch 337      Ch 338      Ch 339      Ch 340

Ch 341      Ch 342      Ch 343      Ch 344

Ch 345      Ch 346      Ch 347      Ch 348

Ch 349      Ch 350      Ch 351      Ch 352

Ch 353      Ch 354      Ch 355      Ch 356

Ch 357      Ch 358      Ch 359      Ch 360

Ch 361      Ch 362      Ch 363      Ch 364

Ch 365      Ch 366      Ch 367      Ch 368

Ch 369      Ch 370      Ch 371      Ch 372

Ch 373      Ch 374      Ch 375      Ch 376

Ch 377      Ch 378      Ch 379      Ch 380

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Ch 401      Ch 402      Ch 403      Ch 404

Ch 405      Ch 406      Ch 407      Ch 408

Ch 409      Ch 410      Ch 411      Ch 412

Ch 413      Ch 414      Ch 415      Ch 416

Ch 417      Ch 418      Ch 419      Ch 420

Ch 421      Ch 422      Ch 423      Ch 424

Ch 425      Ch 426      Ch 427      Ch 428

Ch 429      Ch 430      Ch 431      Ch 432

Ch 433      Ch 434      Ch 435      Ch 436

Ch 437      Ch 438      Ch 439      Ch 440

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Ch 561      Ch 562      Ch 563      Ch 564

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Ch 589      Ch 590      Ch 591      Ch 592

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Ch 601      Ch 602      Ch 603      Ch 604

Ch 605      Ch 606      Ch 607      Ch 608

Ch 609      Ch 610      Ch 611      Ch 612

Ch 613      Ch 614      Ch 615      Ch 616

Ch 617      Ch 618      Ch 619      Ch 620

Ch 621      Ch 622      Ch 623      Ch 624

Ch 625      Ch 626      Ch 627      Ch 628

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Ch 701      Ch 702      Ch 703      Ch 704

Ch 705      Ch 706      Ch 707      Ch 708

Ch 709      Ch 710      Ch 711      Ch 712

Ch 713      Ch 714      Ch 715      Ch 716

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Ch 901      Ch 902      Ch 903      Ch 904

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Ch 989      Ch 990      Ch 991      Ch 992

Ch 993      Ch 994      Ch 995      Ch 996

Ch 997      Ch 998      Ch 999      Ch 1000

# AS8000





# Monitoring System

## DEVELOPMENT AND PRODUCTION

Adash supplies a full range of vibration diagnostics equipment, from simple data collectors to advanced vibration analyzers and on-line monitoring systems. The data from the portable devices and on-line systems can be transferred to Adash DDS software for further analysis and data archiving.

Adash wants to offer tools and software for vibration diagnostics to all kind of customers according to their needs and budget. We want our customers to actively benefit from the features offered by our products instead of putting our tools into shelf.

## SUPPORT AND SERVICE

Our network of 80 distributors around the world are ready to help you with your questions regarding our products. Adash headquarters is also available on the phone and email and as a private, independent company we offer unique customer support.

We are continuously developing and improving our products. This generates regular firmware and software updates which are available on Adash website free of charge.

## WHAT IS VIBRATION DIAGNOSTICS?

Vibration diagnostics is a major part of predictive machine maintenance programs. Vibration diagnostics has over the years proven to be the most effective method for checking "machinery health".

Vibration diagnostics tools are here to help us to predict the machine failures. When predictive maintenance is applied and the machines are checked regularly, machine faults can be discovered at an early stage and appropriate action can be taken. By doing so you can avoid unexpected machine shutdowns and you can prevent replacement of parts which are still in good condition.

## HOW DOES IT WORK?

Running machines generate vibrations, which contain a lot of information about their condition. A vibration meter or analyzer is used to measure this vibration. The sensor needs to be mounted on an appropriate point on the machine (e.g. bearing housing). The instrument measures the vibration signal, tells you the severity of the vibrations and also possible machine fault. The most frequent faults are bearings faults, unbalance, misalignment and looseness.





## WITH ADASH DEVICES YOU CAN ...

- .....> determine the condition of the machine according to ISO standards
- .....> find machine mechanical faults
- .....> determine the condition of roller bearings
- .....> control the lubrication of bearings
- .....> perform balancing
- .....> evaluate operating deflection shapes
- .....> use the stroboscope to check rotating parts



# A4900 VIBRIO M

VIBRATION METER, ANALYZER,  
DATA COLLECTOR

The A4900 - Vibrio M instrument allows you to perform all basic vibro-diagnostics measurements such as bearing condition, identification of mechanical faults and lubrication assessment.

The A4900 - Vibrio M is equipped with 4MB of memory for data storage. Data memory allows you to perform off-route and route measurements. The professional software DDS for Vibrio M can be downloaded from the Adash website free of charge.

Our expert system for automatic machine fault detection is included.



Free version of DDS software  
(limited database size)



- > Quality sensor
- > Solid coiled cable
- > Strong magnetic base

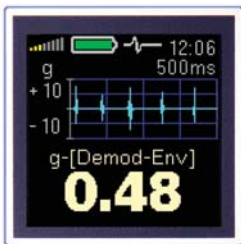


## MEASUREMENTS

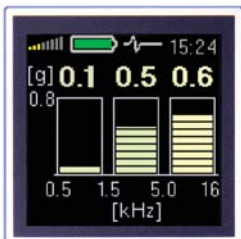
- › ISO value [mm/s, ips]
- › Bearing value [g]
- › ISO 10816-3 included
- › Automatic speed detection



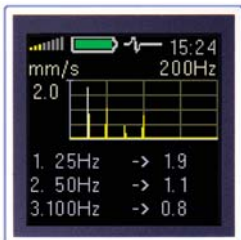
Overall values



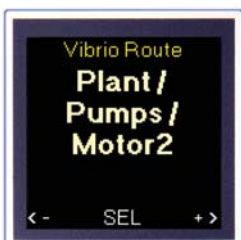
Time signal



Frequency bands



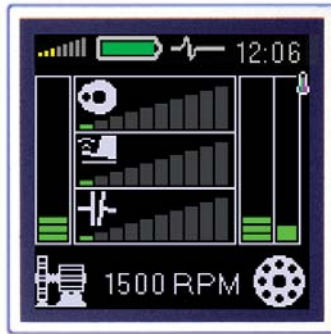
FFT Spectrum



Route measurement

## EXPERT SYSTEM

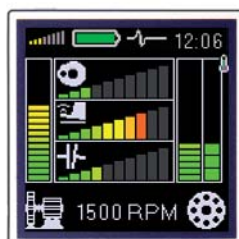
- › Enables automatic machine fault detection on site



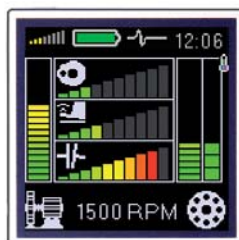
Machine OK



Unbalance



Looseness



Misalignment



Bearing fault



## SIMPLE TO USE

- › Three button operation
- › All functions are predefined
- › Expert functions for fault detection
- › Colour graphic display



## TOP PANEL

- › ACC ICP® - sensor input
- › IR non-contact temperature sensor
- › LED stroboscope
- › Stethoscope output
- › Micro USB for data transfer



## INDUSTRIAL DESIGN

- › Heavy-Duty aluminium case
- › 2AA rechargeable or AA alkaline batteries
- › 8 hours of operation

# A4900 VIBRIO M EX

## DATA COLLECTOR IN INTRINSICALLY SAFE VERSION



The Vibrio M is now also available in an Ex version. All basic vibrodiagnostics measurements are available: Overall Values, FFT Spectrum, Time signal, Frequency bands, Route measurement or Expert system. You can listen to the signal with the headphones supplied with every unit.

The Vibrio M Ex communicates with DDS software, which you can download for free from the Adash website.



**Ex certification: II 2 G Ex ib IIC T4 Gb**

<b>II</b>	Non-mining
<b>2</b>	Zone 1
<b>G</b>	Gas atmosphere
<b>Ex ib</b>	Principle of protection: Intrinsic Safety EN 60079-11, Zone 1
<b>IIC</b>	Gas group - Acetylene, Hydrogen
<b>T4</b>	Temperature class 135°C
<b>Gb</b>	Equipment Protection Level – Zone 1 (high protection)

# A4900 VIBRIO MP

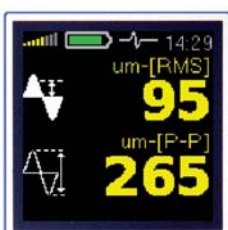
## PROXIMITY OPTION

The A4900 Vibrio MP contains more measurement options than the standard Vibrio M. These additional options are designed for measurement with contactless proximity sensors, which are usually used on protection systems. The Vibrio MP is connected to the buffered outputs of these systems.

DISPLACEMENT  
MEASUREMENT



FFT Spectrum



Overall values



Time signal



# A4910 LUBRI

## OPTIMIZING THE LUBRICATION PROCESS



The A4910 Lubri is a maintenance tool used for monitoring and control of the lubrication process. The A4910 Lubri measures the actual bearing lubrication status and informs the operator when the lubrication state is optimal.

Application of the A4910 Lubri extends the bearing lifetime and saves lubricants. Headphones can be connected to listen to the bearing condition. The A4910 Lubri is simple to operate and also enables you to perform basic measurements and diagnoses of bearing condition.

Now the A4910 Lubri can store the data and perform route measurements as well.



Free version of DDS software  
(limited database size)



- > Increase bearing lifetime
- > Basic vibrodiagnostics measurements

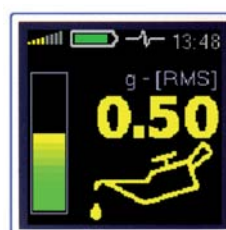


- > Monitoring and control of the lubrication process
- > Bearing condition state

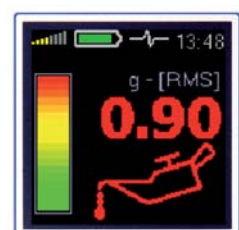
VALUES IN TRAFFIC LIGHT COLOURS  
TELL YOU WHEN TO ADD THE GREASE



Lubrication OK



Add grease



Dry bearing

# 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](http://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.

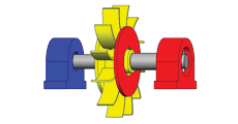
### BALANCER



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

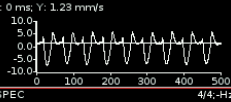
/Meas01

4/4 select done

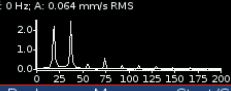
RMS 3.68 mm/s 1/1-Hz

RMS 0.074 g 1/1-Hz

TIME t: 0 ms; V: 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

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

Back Menu Start

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

# A4400 VA4 Pro II

## FAST 4-CHANNEL VIBRATION ANALYZER



- > Adash expert system for automatic machine fault detection
- > Large colour display



- 4 channel signal recording
- Instrument firmware updates free of charge from Adash website

The A4400 - VA4 Pro II is a unique instrument for machinery vibration diagnostics. The A4400 - VA4 II Pro includes modules for analysing, data collecting and vibration signal recording. The instrument is enhanced by modules for dynamic balancing, measurement of run up and coast down, acoustic measurement mode, ultrasound module, monitoring and control of lubrication process and listening to the vibration signal with the stethoscope feature. The instrument is equipped with an expert system developed by Adash, which automatically detects machinery faults. The A4400 - VA4 II Pro is designed for engineers, technicians and researchers dealing with machinery and structural diagnostics as well as dynamic balancing of rotating machinery.





## EXPERT SYSTEM - FASIT

- › Automatic machine fault detection
- › ISO 10816-3 included
- › Bearing database included



## DATA PROCESSING

- › FFT 3 276 800 lines in real time
- › Frequency range up to 90 kHz
- › 20 hours recording of 4 channels
- › Demodulation - envelope analysis, Order analysis
- › ACMT - low speed bearing analysis
- › User defined frequency bands



## TOP PANEL

### INPUT CHANNELS

- › 4 AC, ICP®(On/Off), +/- 12 V pp
- › 4 DC process values, +/- 24 V
- › 1 TACHO

### A/D CONVERSION

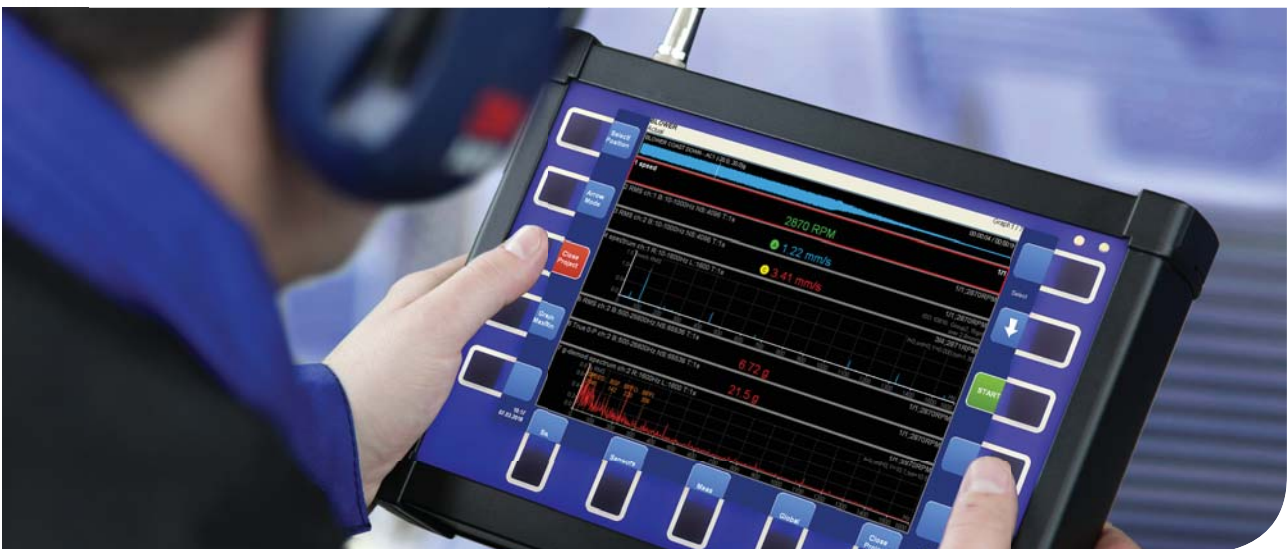
- › 24 Bit A/D conversion
- › 64 Bit signal processing
- › 120 dB dynamic range
- › No Auto-Gain

### USB 2.0

- › High speed data transfer

### HEADPHONES

- › Listening to vibration signal



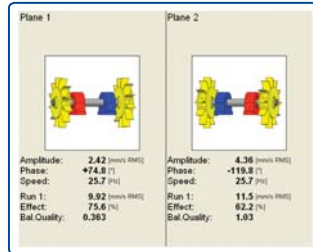


## A4400 VA4 Pro II MEASUREMENT MODES



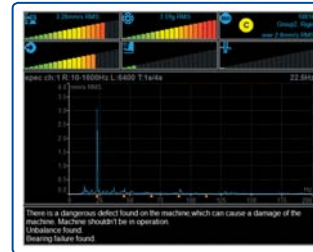
**ANALYZER**

- › 4 channels simultaneously



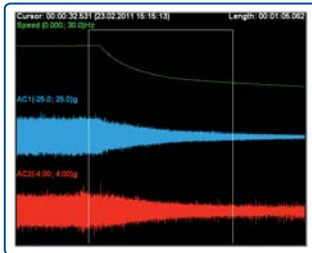
**BALANCER**

- › Intuitive graphical balancing procedure



**EXPERT SYSTEM**

- › Automatic fault detection



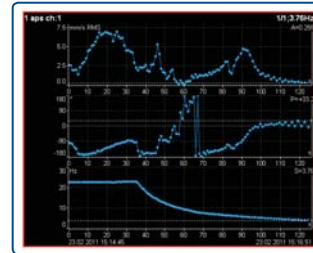
**RECORDER**

- › 4 channels recording
- › 20 hours signal recording



**ROUTE**

- › 8000 measuring points
- › DDS software

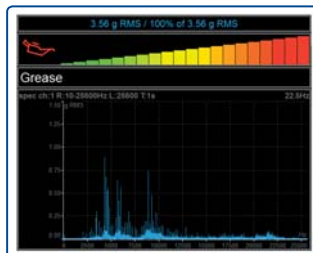


**RUN UP/COAST DOWN**



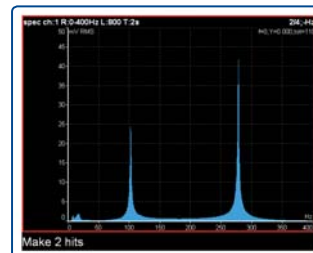
**STETHOSCOPE**

- › Listening of vibration signal

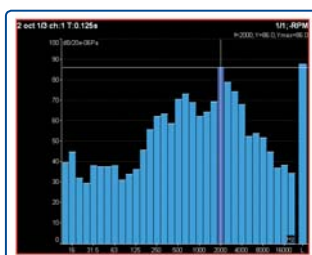


**LUBRI**

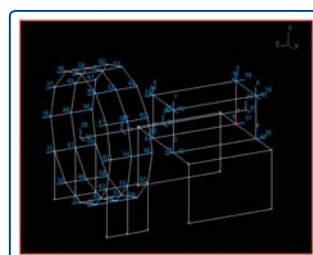
- › Monitoring and control of lubrication process



**BUMP TEST**

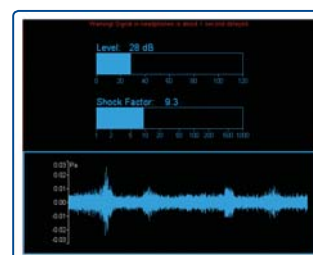


**OCTAVE ANALYSIS**

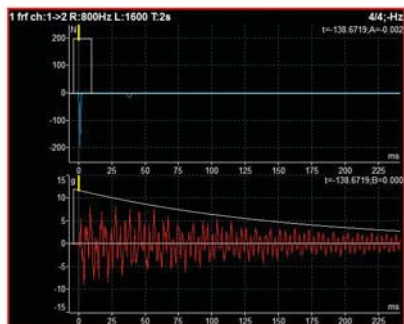
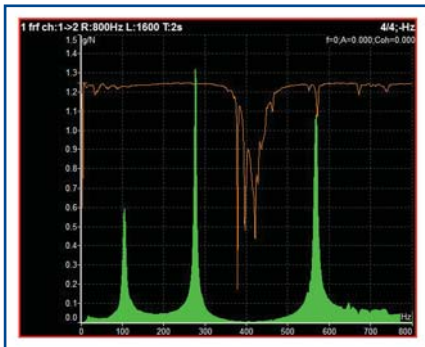


**ADS**

- › Animated deflection shapes



**ULTRASOUND**



## FREQUENCY RESPONSE FOR MODAL ANALYSIS

- › The A4400 VA4 Pro II enables to measure frequency response for modal analysis purposes. It is attractive substitute for large systems, which are usually used for modal analysis measurements.
- › Data are exported in UFF format. They are easily imported to every modal analysis software.

```
Type:          frf
              free-run single
Input:         1
Window:       transient
Shift[ms]:    -4
Length[ms]:   14
Output:       2
Window:       exponential
Shift[ms]:    -4
Length[ms]:   500
Result Type:  H1
Range[Hz]:    800
Lines:        1600
              fs=2048Hz
              t=2s,df=0.5Hz
Avg:          4
              total t=5s
Overlap:      50%
              Save
```

```
Trigger Mode:  single
Runup Mode:   time
Speed Change[Hz]: 1.00
Time Change[s]: 1
Trigger Source: amplitude
Pretrig[%]:   25
Ampl Trig Channel: 1
Ampl Trig Level[N]: -25
External Trig Edge: rising
External Trig Level[V]: 1
              Save
```

## RECORDER MODE - WHEN IT IS USEFUL

Let's say you are going to measure a big industrial blower to find out its behavior during run up. You place the sensor on the machine and set up your measurement. Then you ask the operator to run it and he starts the machine. After a few seconds you realize that you have set your measurements incorrectly and you ask the operator to stop the machine and run it again. But his answer is: "I am sorry sir, the control system will not allow me to run it again, we cannot stop the production now, you have to come over here next month." This could be a problem for you, couldn't it? With the Recorder mode you will avoid such a situation.

Just place the sensor on the machine, run the Recorder mode and record the raw signal during the run up of the machine. Later on, you can analyze this record in the office. In other words you can set any measurement which you like and play this recording again and again to get the required results.



## RAW SIGNAL RECORDING

- › Record the raw signal when you are not sure about the setting. Post-analyze the recorded signal later in the office.
- › With the A4400 VA4 Pro II you can record up to 4 channels simultaneously.
- › A4410 Virtual Unit software for post-analyzing is possible to download from Adash website free of charge.
- › 20 hours signal recording (4 channels, 64 kHz sampling frequency).

# A4500 VA5 Pro

## MOST POWERFUL 4-CHANNEL MULTIFUNCTIONAL ANALYZER



- > Large touchscreen
- > Backlit keyboard



- Built in camera
- Thermal imaging camera
- Ultrasound detection

The A4500 - VA5 Pro is the first instrument on the market, which combines vibration analysis, thermal imaging and ultrasound detection.

It is a leading device for performing measurements in the field of machinery vibration analysis.

VA5 Pro contains all basic measurement modes and measurement possibilities as VA4 Pro II analyzer. Additionally the VA5 Pro enables the connection of a thermal imaging camera for infrared thermography analysis including saving and transfer of IR images into DDS software. The VA5 Pro is equipped also with standard camera for potential machinery images and their later usage in reports. The device is newly equipped with mode for motor current signature analysis, which is a method for electric motors diagnostics.

The A4500 - VA5 Pro is suitable for engineers dealing with machinery diagnostics, on side balancing and for service and inspection activities.





## TOP PANEL

### INPUT CHANNELS

- › 4 AC, ICP®(On/Off), +/- 12 V pp
- › 4 DC process values, +/- 24 V
- › 1 TACHO

### A/D CONVERSION

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

### USB 2.0

- › High speed data transfer

### HEADPHONES

- › Listening to vibration signal



## BACKLIT KEYBOARD

- › VA5 Pro analyzer is equipped with backlit keyboard. This offers very comfortable operation of the device even in darker places with lower visibility.



## VA5 PRO – NEW MEASUREMENT MODES

### THERMAL IMAGING



Thermal imaging camera gives you another sense. Find overheated bearings, loose electrical connections, blocked pipes on heat exchangers and other industrial problems.

IR camera has 384 x 288 pixels resolution with -10 to 250 °C temperature range.



### CAMERA



Built-in camera helps you to organize maintenance jobs. Take a picture of a machinery with suspicions visible fault such as oil leak, loose part or other fault. Pictures can be stored into DDS software for further action. Camera has 5 MPx resolution and autofocus.





## LARGE TOUCHSCREEN



## MOTOR CURRENT SIGNATURE ANALYSIS



Motor current signature analysis is a useful tool for electric motors inspection. Especially for detection of broken rotor bars, air gap eccentricity, shorted turns in stator windings and power quality.





# A4404 SAB

## POCKET ANALYZER



The A4404 - SAB is a pocket sized 4 channel vibration analyzer.

→ Connect the A4404 - SAB to any computer by USB and use the unit for data analysing, collecting and the recording of vibration signals. The instrument is enhanced by modules for dynamic balancing, measurement of run up and coast down and acoustic measurement mode. The instrument is equipped with an expert system developed by Adash, which automatically detects machinery faults.

The instrument is powered directly by USB connection so no external power is needed.



Connect A4404 SAB to your laptop and get all functions of 4 channel analyzer VA5 Pro



Free download of VA5 Pro - Virtual Unit software enables you to try all functions of the analyzer on your computer

VA5 PRO - VIRTUAL UNIT SOFTWARE

POCKET SIZE 4 CHANNEL VIBRATION ANALYZER  
Input channels: 4 AC, ICP® (ON/OFF), 4 DC, 1 TACHO



# A4950 STROBO

## STROBOSCOPE



Stroboscope enables to ostensibly stop rotating or generally periodic (reciprocating) motion of a machine. It allows also to find out the speed of rotation or to perform synchronized measurements without having to use reflective markers on the shaft.

The A4950 stroboscope uses three ultra-bright LEDs with optical system as a source of flashes. The device is equipped with a colour graphic display and 3 operational buttons. Operation is very easy and intuitive. Two standard or rechargeable AA batteries are used for powering. The A4950 stroboscope can be used also as a tachometer by connecting an external speed probe.



- > Flashing frequency range from 0.5 Hz to 500 Hz
- > Control of the flash duration



Flashing controlled by internal or external triggering

# A4802

## SENSOR SIMULATOR



The A4802 Sensor Simulator device behaves like a standard ICP® acceleration sensor with a sensitivity of 100 mV/g. The unit generates precise amplitude levels on 80 Hz and 8 kHz frequencies. The unit A4802 enables the user to check measurement precision and functionality of analyzers, vibration meters, protection and monitoring systems.



Quick check of cables, analyzers and monitoring systems

### A4801

- > Simulates the acceleration sensor 100mV/g
- > Two output connectors - MIL, BNC

# A3716

## ON-LINE MONITORING SYSTEM - IT HAS NEVER BEEN EASIER!

The A3716 is a powerful online monitoring system for rotating machinery. The A3716 system can operate as an independent monitoring system or it can be used as an extension of an existing protection system.



WiFi connection



Adaptive data acquisition algorithm



### A3716-3U

- > 16 channels AC
- > 16 channels DC
- > 4 TACHO inputs
- > 16 BNC buffered sensor signal outputs
- > 16 programmable relay outputs
- > 16 programmable 4-20 mA outputs

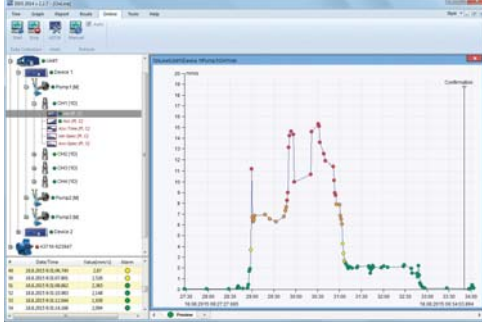
The A3716 module contains 16 AC, 16 DC and 4 TACHO inputs. All channels are measured simultaneously. The A3716 modules can be easily combined to create a system with more channels.



Example of use - 3 pieces of A3716 2U

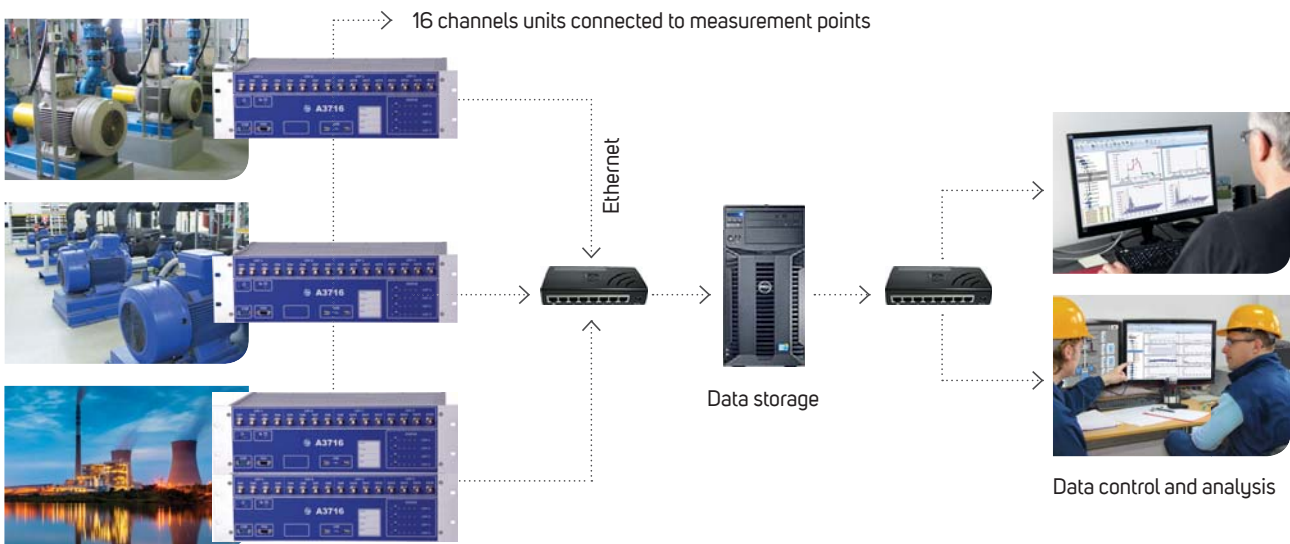


## SET UP AND CONTROL



- › The set up and control of the A3716 is done by the DDS software. The set up has never been easier. The only thing you need to do is to create the tree of machines, measurement points and required readings and assign them to appropriate channels. Then you just press START and the readings are taken automatically.
- › The new data acquisition control system was developed for the A3716. Now the unit reads the vibration continuously, not only at predefined time intervals. The adaptive algorithm saves the readings to the database.
- › The A3716 unit continuously monitors the required machines and adaptively saves the readings to the data storage computer. The data is accessible from various workstations for control and analysis.
- › The great advantage of the DDS software is its very easy set-up. There is no difficult installation of the server anymore and no complicated set-up of parameters. The demands for transfer and data storage are minimized.

## APPLICATION SCHEME OF A3716 UNITS



## A3900

### 1-CHANNEL ONLINE SYSTEM



The A3900 is a simple one channel online monitoring system. The measured value is displayed on the front panel and transferred to the control system through the 4-20 mA current loop output. The A3900 unit includes one programmable output "ALARM" relay.

#### A3900

- › 1 channel, selectable value: [mm/s] / [ips] / [g]
- › Display of values
- › 4-20 mA current loop output
- › Relay output
- › Setup by PC

# A3800

## COMPACT SIZE ON-LINE MONITORING SYSTEM



- > Optional number of input channels
- > Compact size, DIN rail mounting
- > Adaptive algorithm of data acquisition
- > Remote multichannel analyzer



WiFi connection

The A3800 unit is the compact size on-line monitoring and diagnostic system. It is designed to increase machine reliability. The small size of the A3800 enables to mount it directly on the DIN rail.

The optional number of channels (4, 8, 12, 16) is available on the A3800 unit. The same number of AC and DC channels are always available. The 4 tacho sensors can be used in 16 channel option. The number of channels is determined by the license file. When the user wants to increase the number of channels, then only the new licence file is written to unit memory. No unit disassembling is required.

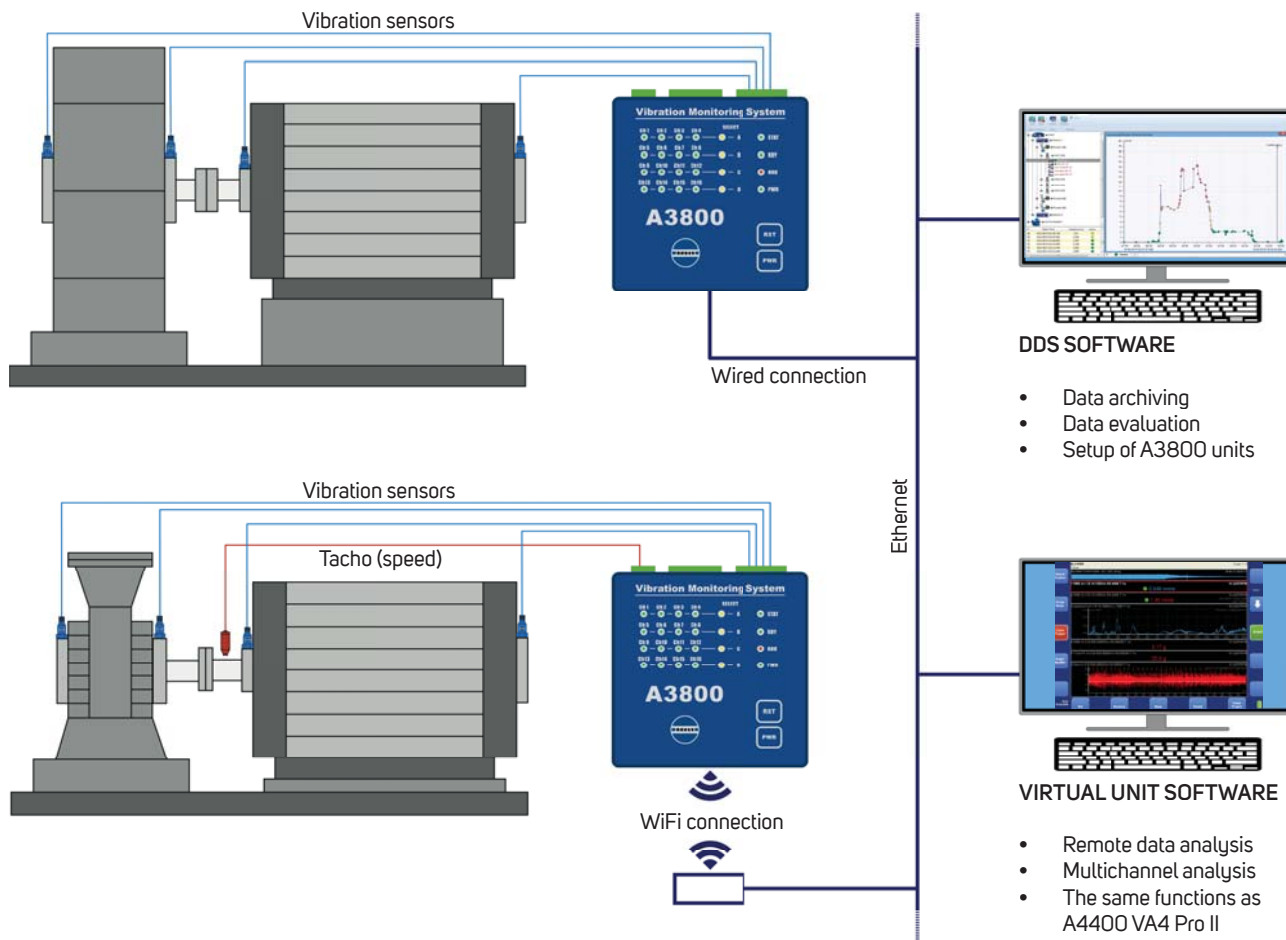
Each group of 4 channels measures fully simultaneously. Individual groups of 4 channels are multiplexed.



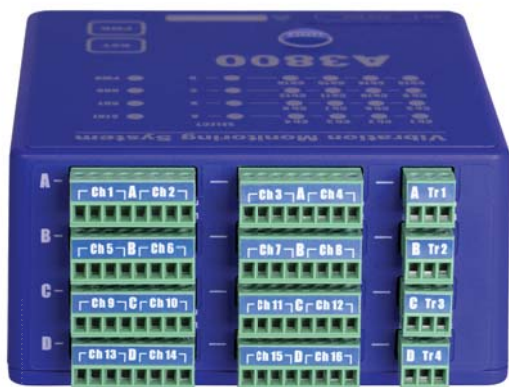
A3800

- > 4 - 16 channels AC
- > 4 - 16 channels DC
- > 1 - 4 TACHO inputs

# APPLICATION SCHEME OF A3800 UNITS



The A3800 unit can be also used as a powerful multichannel analyzer. The setting and control is made by VA4 Pro - Virtual Unit software (free download).



A3800 - TOP PANEL



A3800 - BOTTOM PANEL

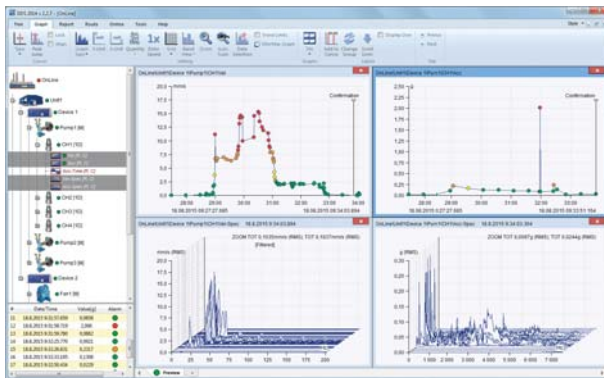


# DDS SOFTWARE

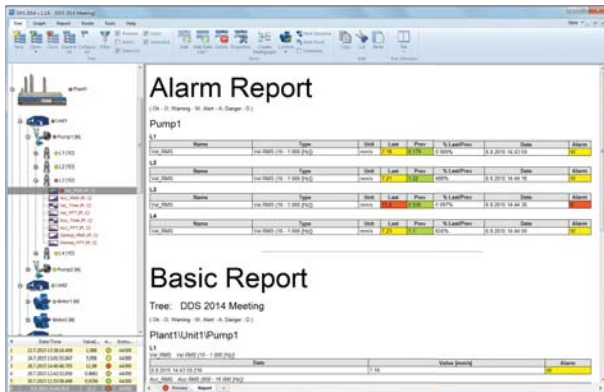
## A POWERFUL TOOL FOR DATA STORING AND EVALUATION

The Digital Diagnostics System software represents a powerful tool for storage and evaluation of vibration and technical diagnostics data. It allows the user to connect and work with data collected by portable data collectors and on-line monitoring systems. In the full configuration, it includes all the functions necessary for data transfer, analysis and data storage.

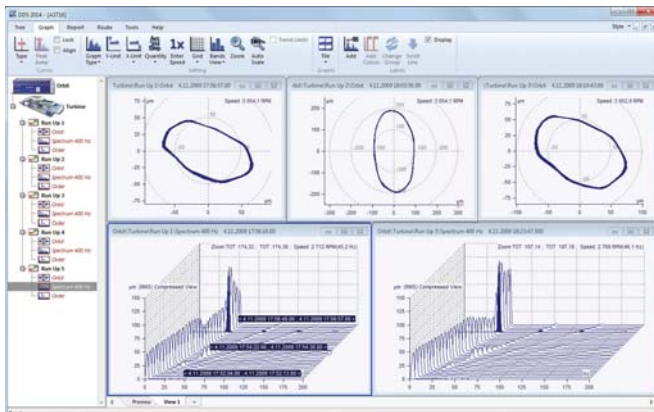
DDS software communicates with all Adash vibration meters and analyzers and also with the online monitoring systems, so there is just one program needed for all analysis performed with Adash devices!



Limit values



Report



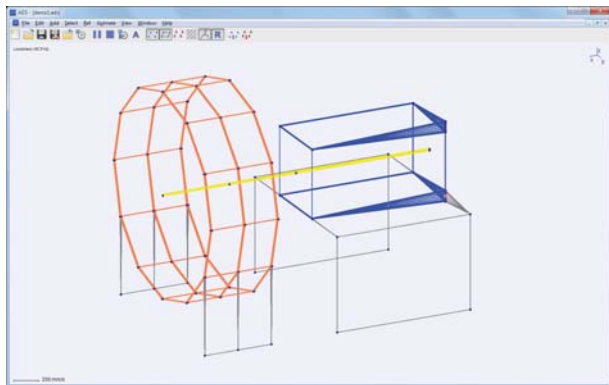
On-line

- > User friendly
- > High reliability

- Software updates free of charge
- No annual fees

# ADS SOFTWARE

## VIZUALIZATION OF VIBRATION MOVEMENT



The Animated Deflection Shapes software is based on the method of operating deflection shapes.

This means that we visualize the vibrations of the machine by animation. During the animation the vibration movement is slowed down to very low frequency and the amplitude of the motion is increased so we can see the vibration.

It is a combination of vibration measurement and software processing. The output of the method is vibration movement animation on one forcing frequency or on multiple forcing frequencies.

The output of the method is easily understandable for everybody.



**Immediate visualization of the vibration movement**

# ROUTE DOWNLOADER

## SEND THE ROUTE TO TECHNICIAN ON THE OTHER SIDE OF THE WORLD



Route Downloader is a simple tool for Route transfer. DDS software can create the Route tree as one small file. You can send this file through email to your technician who is far away and who does not have an access to DDS software. He will load the Route tree to his data collector through Route Downloader and will take the readings. Then he will create again one file in the Route Downloader and send you this file (with measured data) back to you. This file will be read by DDS and measured data will be stored into your DDS Route tree.



**Route Downloader is compatible with all Adash portable devices.**



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MASTER THE LANGUAGE OF YOUR MACHINERY

