

A3800

COMPACT SIZE ON-LINE MONITORING SYSTEM

MASTER THE LANGUAGE OF YOUR MACHINERY

Adash

A3800

COMPACT SIZE ON-LINE MONITORING SYSTEM

- **Optional number of input channels**
- **Compact size, DIN rail mounting**
- **Adaptive algorithm of data acquisition**

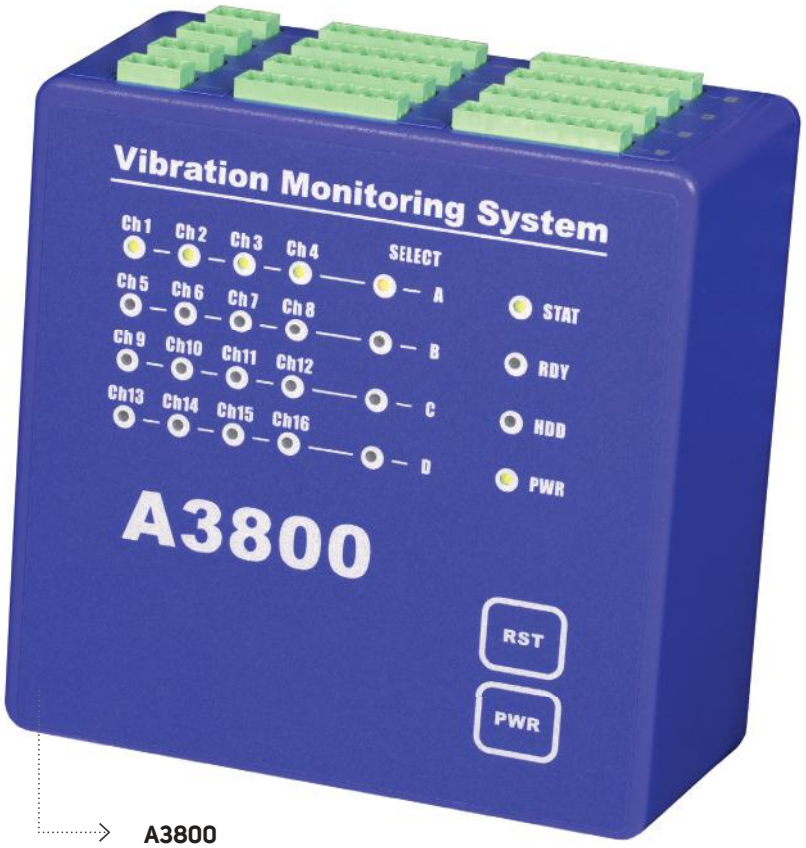
Remote multichannel analyzer

The A3800 is a compact size on-line monitoring and diagnostic system designed to increase machine reliability. The compact size of the A3800 enables it to be placed directly on the DIN rail in the switchboard.

The A3800 unit has an optional number of AC and DC input channels - 4, 8, 12 or 16. AC and DC channels are separate. This means that the 4-channel configuration allows you to connect 4 AC and 4 DC channels. Depending on the number of active input channels, we can use 1 - 4 independent TACHO inputs. The number of active channels can be extended additionally by purchasing additional licenses.

Each group of 4 channels allows fully simultaneous measurements. Groups of 4 input channels are switched to each other via a multiplex.

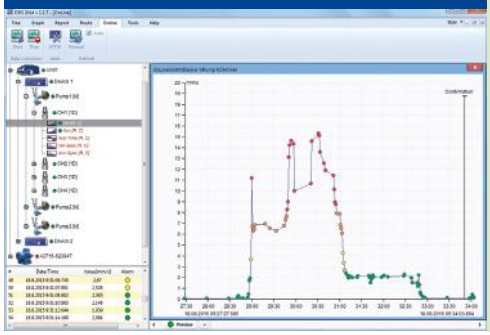
The A3800 unit can be used also as a powerful multichannel analyzer. The setting and control of A3800 unit is done in DDS software.



A3800

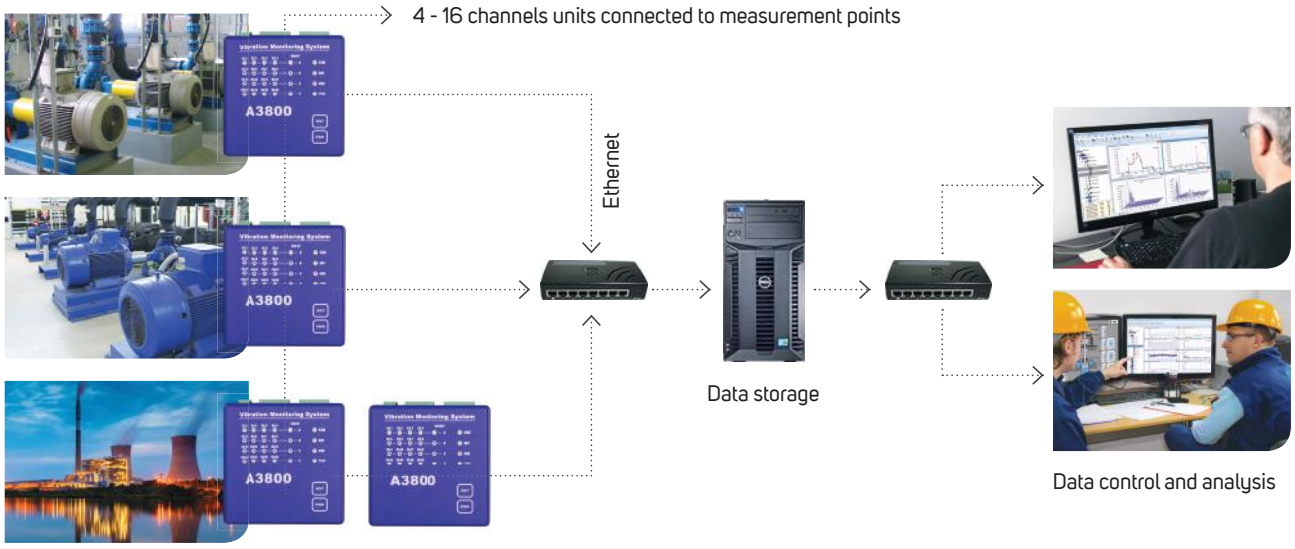
- 4 - 16 channels AC
- 4 - 16 channels DC
- 1 - 4 TACHO inputs

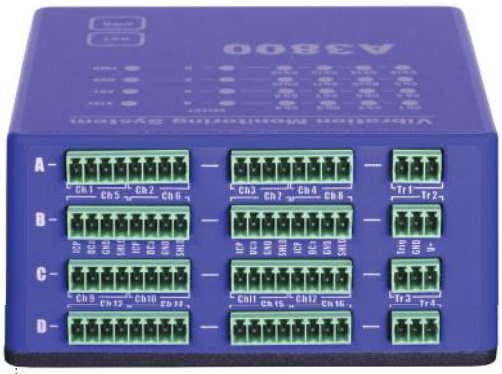
SET UP AND CONTROL



- The set up and control of the A3800 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 and A3800 systems. Now the units read the vibration continuously, not only at predefined time intervals. The adaptive algorithm saves the readings to the database.
- The A3800 unit continuously monitores 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 A3800 UNITS





A3800 - TOP PANEL



A3800 - BOTTOM PANEL

A3800 TECHNICAL SPECIFICATIONS:

Input channels AC:	4 - 16 AC, ICP® power supply on/off input impedance 100kΩ integration single, double high pass filter 1 Hz - 12 800 Hz low pass filter 25 Hz - 25 600 Hz
Input channels DC:	4 - 16 DC for process values input impedance 100 kΩ (VDC), 250 Ω (mADC)
TACHO inputs:	1 - 4 independent TACHO for external trigger speed range 0,8 Hz - 1000 Hz
Input range:	AC +/- 12 V peak-peak DC +/- 24 V or 4 - 20 mA TACHO +10V
AD conversion:	24 bit, 64 bit double floating point internal signal processing No AutoGain function!
Dynamic range S/N:	120 dB
Frequency ranges:	max. 25,6 kHz (16 Ch, 65,5 kHz sampling)
Sampling mode:	Fully simultaneous for group of 4 channels
FFT resolution:	Min. 100 lines Max. 25 600 lines
Processor:	Intel Atom E3815 – 1.46 GHz
Memory RAM:	2 GB
Internal data disc:	SSD 32 GB
Data acquisition:	Overall values Time signals FFT real time analysis DEMOD - ENVELOPE analysis ACMT - low speed bearing analysis order analysis user band pass analysis RPM measurement DC measurement Orbit measurement Speed measurement
Signal Recorder:	64 kHz sampling frequency 4 Ch memory consumption 3 GB/hour 4 Ch total recording - 10 hours
Trigger:	free run, TACHO, external (voltage)
Communication:	Ethernet 1GB RJ45
Temperature range:	-10˚C to +50˚C
Power:	DC 12 V
Case:	aluminium box
Size & Weight:	117 x 117 x 58 mm (without connectors) 800 g

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