

ONLINE MONITORING SYSTEM





MASTER THE LANGUAGE OF YOUR MACHINERY



# 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.



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#### Adaptive data acquisition algorithm



A3716-3U

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- > 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 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 A3716 UNITS**





### TECHNICAL SPECIFICATIONS:

Input channels AC:	16 AC, ICP® power supply on/off input impedance 100k $\Omega$ integration single, double high pass filter 1 Hz - 12 800 Hz low pass filter 25 Hz - 25 600 Hz
Input channels DC:	16 DC for process values input impedance 100 k $ \Omega$ (VDC), 250 $ \Omega$ (mADC)
TACHO inputs:	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 16 channels
FFT resolution:	Min. 100 lines Max. 25 600 lines
Processor:	Intel Core2 - 2.5 GHz
Memory RAM:	4 GB
Internal data disc:	SSD 128GB
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 - 35 hours
Trigger:	free run, TACHO, external (voltage)
Communication:	Ethernet 1GB RJ45
Temperature range:	-10°C to +50°C
Power:	AC 110 - 240 V, 45 - 65 Hz
Case:	19´´aluminium rack
Size & Weight (2U):	430 x 360 x 90 mm 4,7 kg
Size & Weight (3U):	430 x 360 x 135 mm 6,2 kg

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