



# Protecting Production Protecting Profits

## Finally, Affordable Machine Monitoring !!!

**rioNet's plant monitoring system protects plant production by continuously monitoring critical machinery**

**rioNet helps you better manage limited PDM resources**

- **Check on the health of a piece of equipment once a week or ten times a minute.** With rioNet's flexible scan rate, you can focus on problem areas without disrupting work schedules.
- **rioNet allows management of PDM resources while it monitors equipment.** With rioNet's alarming and communicating capabilities, maintenance personnel will know automatically where to focus their time and managers will know if problems go unattended.

### Protection Where You Need It

With five, eight or sixteen inputs per module and radio communications, protection can easily be put where it's needed.

### Start Small ⇒ Grow Large

No large investment in large full plant monitoring system. **rioNet** lets you grow from a single machine to an entire enterprise.

### Affordability Designed In

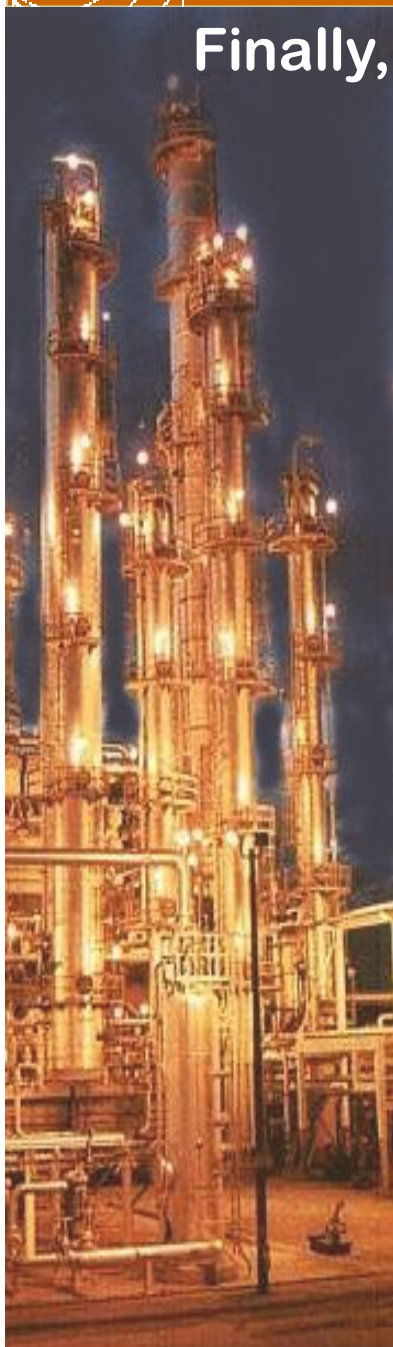
From the very beginning, RioTech Instruments has designed **rioNet** to allow plant and maintenance managers to cost justify protecting and monitoring critical pieces of equipment 24 hours a day 7 days a week without the high cost associated with other online monitoring systems.

### rioNet Monitors

- **Pumps**
- **Motors**
- **Compressors**
- **Fans**
- **Dust Cyclones**
- **Engines**
- **Turbines**
- **and More!**

### Extensive Alarming

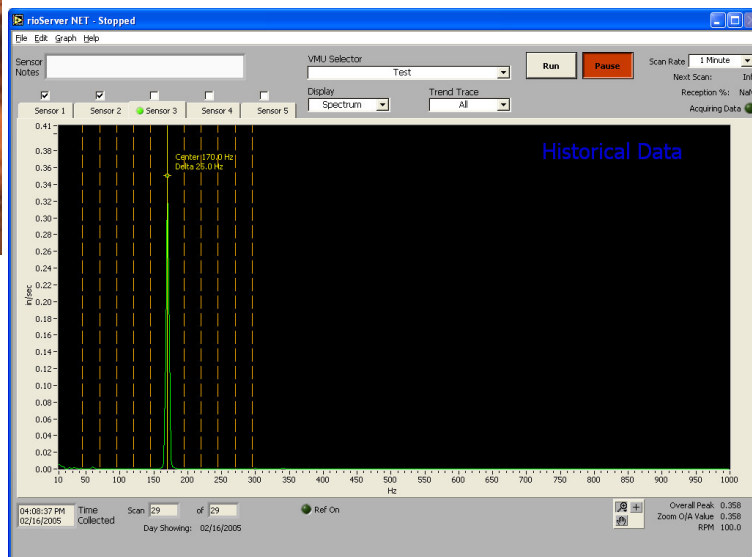
- **Envelope**
- **Band**
- **Trend**
- **Auto Learn**
- **Email Notification**



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# Vibration and Condition Monitoring For Compressors and Engines

Riotech Instruments Ltd LLP protects profits by giving reliability managers more cost justification for the installation of continuous monitoring systems on more of their engines and compressors

Riotech Instruments have systems that can monitor critical frequencies and process parameters at a local machine, sharing information with local controllers. Plus detailed FFT's can be transmitted offsite for in-depth evaluation.



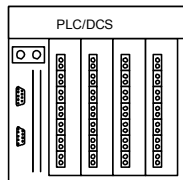
Riotech Instrument's VMU300 series modules are in place today monitoring for changes in such things as:

- Bearing Looseness
- Leaky Valves
- Impacting
- Gear tooth failure
- Detonation Issues



Modbus  
RS485

Modbus over  
Ethernet



Riotech's VTU modules allow up to 13 different vibration parameters per sensor to be monitor locally by a PLC/DCS or SCADA



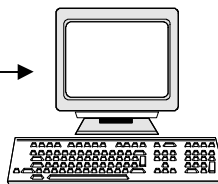
A VMU300 series can monitor 5, 8 or 16 points

Remote Site



IP Networks  
Cellular Network  
Radio Networks

Local Computer



Riotech's VMU modules allow detailed vibration and process data to be sent long distances using 900MHz radios, cellular modem, and/or the Internet.

## System Capabilities

### Vibration Capabilities

- ICP<sup>®</sup> Powered Inputs
- DC - 20,000 Hz
- 100 - 6,4000 line FFT
- Tach Input

### Process Input

- 0 - 20VDC
- +/-10VDC

### Trending Capabilities

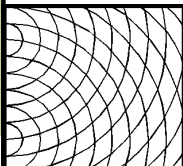
- Overall RMS
- Banded RMS
- True Peak
- Peak to Peak
- Crest Factor
- Many others

### Viewing Capabilities

- Acceleration, Velocity and Displacement
- Sideband and Harmonic Cursors
- Demodulation
- Hz, CPM, Orders

### Power Requirements

- Voltage: 10 - 24VDC



**rioTECH**  
Instruments

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