



# The next step in vibration analysis

## Easy to use low cost Machinery Health Monitoring

Machinery Health Monitoring Tools from [testproductsintl.com](http://testproductsintl.com) • 800.368.5719

### BENEFITS

Automatically detects out of balance, misalignment, looseness and bearing defects

Predictive analysis capabilities that accurately calculate time frame to failure

Condition based monitoring analyzes bearing wear and gear degradation

Saves and reads measurement values to/from RFID tags with Optional RFID

Built-in IEPE (constant current) accelerometer power supply

Rugged fully waterproof construction meets IP67 and MIL-STD-810F requirements.

### MARKETS

Commercial/  
Industrial HVAC

Food Processing

Manufacturers

Mining

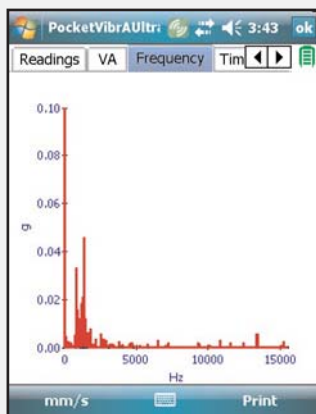
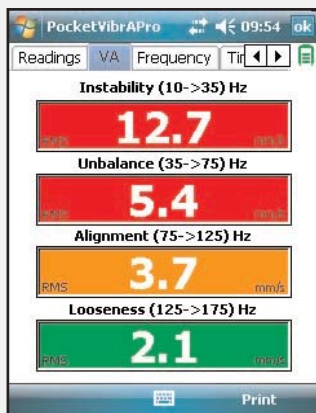
Packaging

Petrochemical

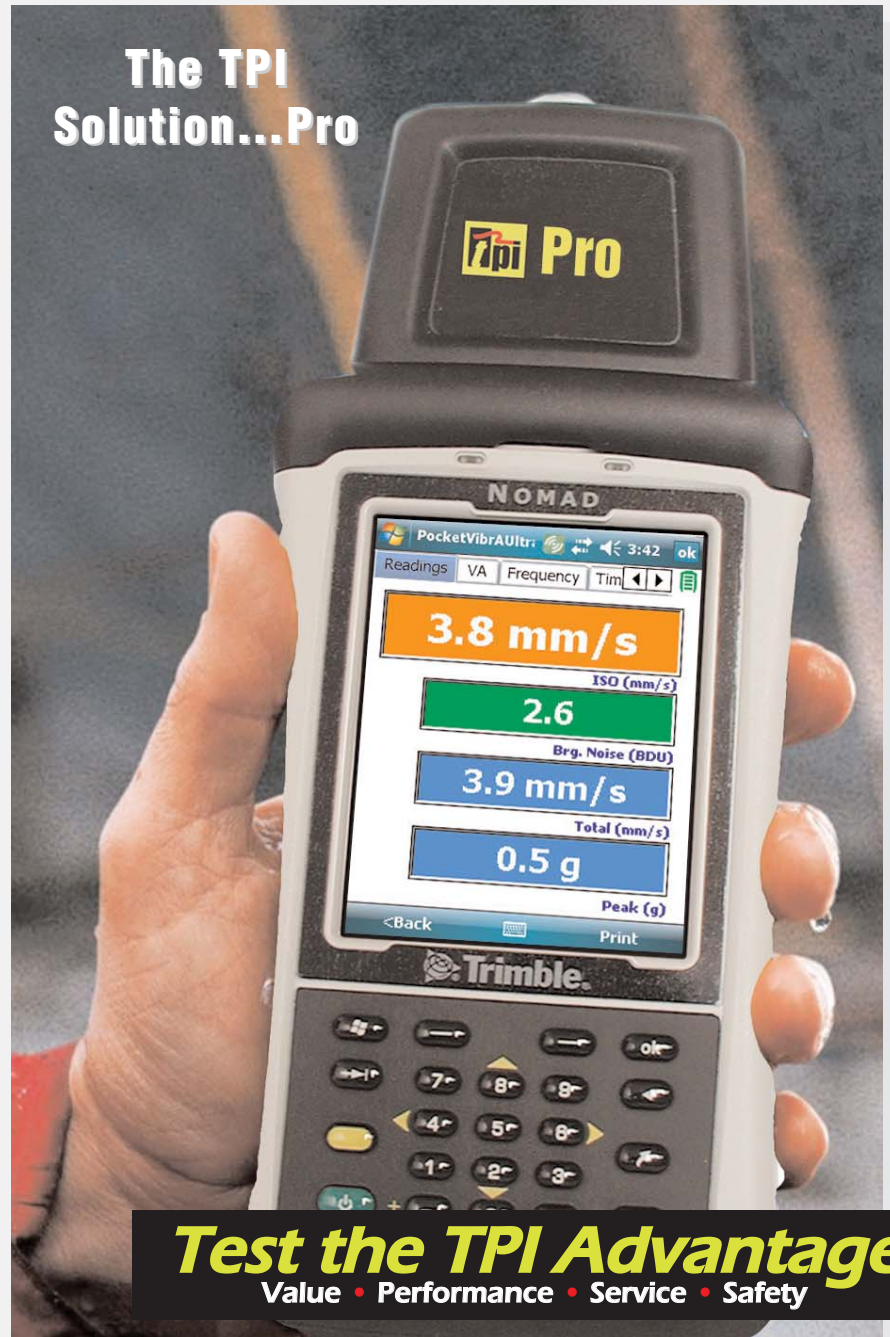
Printing & Paper  
Processing

Utilities

Pro  
Data Sheet  
0911



### The TPI Solution...Pro



**Test the TPI Advantage**  
Value • Performance • Service • Safety

### C-Trend Software gives you greater ease of use and flexibility.

- Store, analyze and report on all your vibration, lube and process parameters (e.g. oil pressures, lube volume, temperature, run hours, etc.) in one place.
- All information is just a click away. Color coded alarms highlight problems. Trend lines show problems before they happen.
- Data can be accessed anywhere on any machine, with optional networking software. Plant history is everything and C-Trend turns it into useful information with the click of a mouse!

**C-Trend software:**

**Asset manager**

- Displays asset status (valid, warning or alarm) for ISO, bearing quality etc, with date and time of reading.
- Assets can be Created, Edited, Deleted, Copied and Pasted into Sites.
- Sites (and their assets) can be selectively added to a sync list for downloading to PocketVibrA unit.
- Automatic set up and down load of Routes.
- Reports can be created on individual or groups of assets (selected via the Report Wizard) as editable Word files with embedded Excel graphs for trends and frequency plots.

**Measurement point display**

- Total vibration (mm/s and g) from 0Hz to 15kHz, ISO (10Hz-1kHz), Bearing Quality (BDU), Crest factor, Demod (Envelope), VA Bands (instability, balance, misalignment and looseness) plus any number of user defined parameters (text or numerical values).
- Individual readings (on any date) can be selected for frequency plot or time waveform display (all axes are zoomable).
- Top ten peaks can be displayed and sorted by frequency or amplitude.
- Fully adjustable harmonic cursors.
- Zoomable "waterfall" diagrams with user selected data.

**Pro software:**

**Asset manager**

- Displays sites, assets and measurement dates and times as a "tree" structure.
- Stylus free navigation of route and measurement points and capture of readings using numeric key pad.
- Auto identification of measurement points using RFID tags or auto recognition of "smart" accelerometer via easy to use set up procedure.
- No set-up "meter mode" with full FFT and waveforms.

**"Run asset" display**

- Individual measurement points (MP) are numbered and described with text.
- MPs color coded to show if readings have been taken
- Previously taken readings can be viewed or retaken.
- With optional RFID module readings can be saved to RFID tags for later recall and comparison with current readings.

**Measurement point readings display**

- User selectable, simultaneous display of any four from: ISO mm/s, Total RMS (mm/s or g), Bearing quality (BDU), Peak g, Crest Factor or Demod (Envelope).
- Time waveform and frequency plots (fully zoomable).
- VA bands display alarms as color coded (red, amber, green) RMS values.

<b>Size</b>	8.7" x 3.7" x 1.8" (220 mm x 95mm x 45mm)
<b>Weight</b>	1.1 lb (500g)(not including accelerometer)
<b>Environmental</b>	
Water: .....	MIL-STD-810F, Method 512.4 IP67 sealed against accidental immersing (1m for 30 min)
Drop:.....	MIL-STD-810F, Method 516.5, Procedure IV 26 drops from 1.22 m 6 additional drops at -4°F (-20°C) 6 additional drops at 140°F (60°C)
Operating: .....	-22° to 149°F (-30° to 65°C)
Storage: .....	-40° to 158°F (-40° to 70°C)
Humidity: .....	MIL-STD-810F, Method 507.4
Sand & Dust: ....	IP67, Mil-STD-810F, Method 510.4, Procedures I & II
<b>Power supply</b>	Rechargeable battery (charger included)
<b>Battery life</b>	Typically 8-20 hours operating time depending on backlight usage.
<b>Frequency ranges</b>	0 Hz to 1 kHz 0 Hz to 15 kHz
<b>Frequency resolution</b>	Up to 0.3 Hz 400, 800, 1600, 3200
<b>Displayed Amplitude Units</b>	Acceleration in g Velocity in mm/s ( or inches/s) Bearing noise in BDU (bearing damage units)
<b>Displayed Frequency Units</b>	Hertz (Hz), RPM or CPM
<b>Input range</b>	+/- 50g with standard 25mV/g TPI accelerometer
<b>Dynamic range</b>	120 dB +/- 50g to +/- 0.0004g with standard accelerometer
<b>Auto set up of VA diagnostic bands (RPM = run speed)</b>	Instability           0Hz - 0.75 x RPM Unbalance           0.75 x RPM - 1.5 x RPM Alignment           1.5 x RPM - 2.5 x RPM Looseness           2.5 x RPM - 3.5 x RPM
<b>Envelope demodulation filters</b>	Fully user selectable high pass and low pass filter cut off frequenci es
<b>Accelerometer Connection</b>	BNC
<b>IEPE accelerometer interface</b>	Constant current accelerometer power supply (+20 volts @ 2mA) can be switched off for use with BNC output control panels
<b>Numeric Keypad or Touch screen operation</b>	Stylus free collection of vibration data using numeric key pad or by touching screen
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>• Carrying case with neck strap</li> <li>• Stylus lanyard</li> <li>• Docking station</li> </ul>