Prosig Condition Monitoring System

PROTOR–mobile

Portable Vibration Condition Monitoring

PROTOR-Mobile is the ideal investigative tool for condition monitoring of rotating machinery. It provides the same extensive facilities as a standard PROTOR system, but as a portable unit, rugged enough to withstand a typical Power Station environment.

PROTOR–mobile

Specification

Power Requirements	24V DC External 110/220V AC to 24V DC power supply included.
Dimensions	360mm (W) x 105mm (H) x 310mm (D)
Input channels	Up to 16 channels per chassis Multiple chassis may be configured for expansion
Resolution	16-bit
Maximum Sample Rate	20K samples/second per channel
Input Frequency Range	DC to 10KHz
Input Coupling	Programmable DC Direct , AC with 1Hz high pass filter.
ICP Transducer support	4mA supply from 24v source
Input Voltage	Programmable +/- 24V, +/-10V +/- 1V +/- 100mV
Input Impedance	800 KOhm. Galvanic isolation available as an option.
Maximum Common Mode Voltage	±200v common mode compliance.
Anti-aliasing Filter	Programmable 8-pole Butterwoth low-pass filter in range 200Hz to 20KHz.
Phase matching	Better than 1deg between channels. Phase compensation for filter delays performed.
Tacho Input Range	±24V
Tacho Frequency Range	0 to 120,000 RPM
Tacho Conditioning	Dedicated conditioning for 2 tachometer signals per unit. Programmable threshold, slope and re-trigger period.
Speed Reading Accuracy	Better than +/- 1RPM
Synchronous Sampling	Programmable synchronous sampling circuitry to provide 16,32,64,128 or 256 pulses per cycle.
Constant Sampling	Programmable constant rate sampling clock.
Frequency Analysis	Overall level and DC component Harmonic amplitude and phase analysis for orders 1x, 2x, 3x, 4x and selected order Subsynchronous amplitude and Frequency Non-synchronous energy Window selection (Hanning or Flat-top) Spectral Banding mode

Features

Displays include:

- Runups
- Mimic diagrams
- Rundowns
- Orbits
- Vector plots
- Numerical displays
- FFT's
- Trend plots
- Order plots
- Bode plots
- Waterfalls
- Shaft gaps displays
- Cascade and overlay X-Y plots
- Demand time and spectra
- Combined vibration and plant process parameter plots
- Reference overlays during runup and rundown

Alert processing includes:

- Amplitude exceedance for overall and selected orders
- Exceeding elliptical boundaries in amplitude and phase
- Exceeding difference in RMS and sum of harmonics
- Exceeding subsynchronous amplitude
- Step Alerts
- Banded spectra alerts
- Vibration alerts dependent upon plant process parameters
- Filtering of wild alerts

Data acquisition details:

- Synchronous or time based
- All channels sampled simultaneously
- Total of 16 or 32 channels which may be either dynamic or static
- Groups of 8 channels may be associated with phase reference signal

Find out more about the Prolog at prosig.com/protor/protormobile.html

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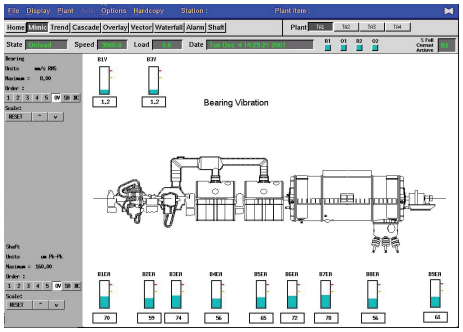

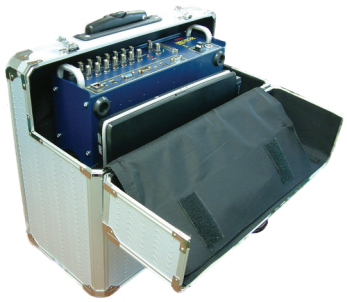

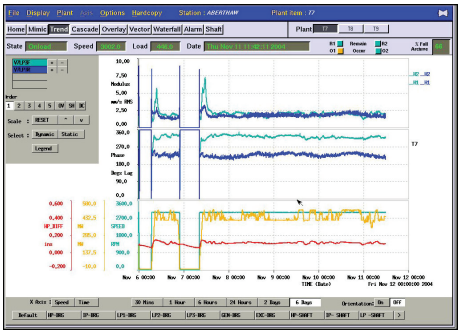

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