



PT690 Vibration Data Collector

Features

- ✓ Simultaneously measures acceleration, velocity and displacement
- ✓ Route is programmable up to 500 points
- ✓ User friendly interface
- ✓ Powerful analysis software with spectrum, waveform, waterfall, trend and machine image
- ✓ 4 lines display with back light
- ✓ Auto power off
- ✓ Hand input process data
- ✓ Machine image with condition status and overall level
- ✓ Software supports multiple data collectors
- ✓ Cost effective solution for in-depth condition monitoring
- ✓ Simple upgrade from vibration meter

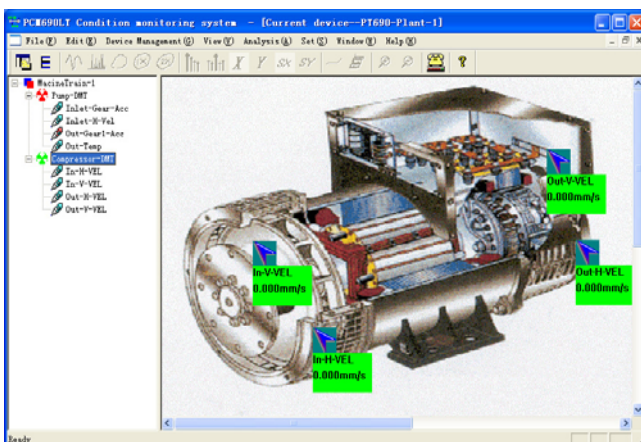


monitoring. The PT690 is ideal for large plants which require several vibration data collectors and/or for plants with a limited budget in condition monitoring.

Cost Effective Solution with Programmable Route and Alarms

The PT690 system consists of the PT690-DC data collector and PCM690 analysis software. ProvibTech provides a cost effective, yet feature rich solution in machine condition

The PT690-DC collects and stores waveform, spectrum, overall vibration and alarm status of each point in a route. It also processes the information and displays the measurement point ID, last measurement data, overall vibration, and the alarm status. With the PT690 a user has the ability to manually enter process variables which are then recorded by the PT690.



Display: Acceleration, Velocity and Displacement

With advanced digital processing, this “smart measurement” is available to display acceleration, velocity and displacement simultaneously. It is simple to use; any field service personnel can use the PT690-DC with little or no training.



Portable and Online Condition Monitoring Products

Powerful Analysis Software with Spectrum and Waveform

Once the collected data from the PT690 is up-loaded to the PCM690 analysis software, one may analyze the machine condition with: alarm list, spectrum, trend, or with a visual inspection of a machine image to obtain an understanding of the machine condition.

For the vibration expert who requires additional information for analysis, the PCM690 offers waveform, spectrum, and waterfall for each measured point. With further analysis of each plot with harmonics, sideband, zoom, mark, etc. one can also compare the collected spectrum with standard spectrum to locate deviations.

Electrical

Frequency Response (+/- 3db):

Acceleration: 2 - 1,000 Hz

Velocity: 5 - 1,000 Hz

Displacement: 5 - 1,000 Hz

Measurement Range:

Acceleration (pk or RMS):

0 - 20g

Velocity (pk or RMS):

0 - 100 mm/sec (0 - 4 in/sec)

Displacement (pk-pk):

0 - 2,000 um (0 - 80 mil)

Process Variable:

Hand input

Peak and pk-pk are RMS converted

Waveform and Spectrum:

Collect and store 1,000 data variables for each measurement point.

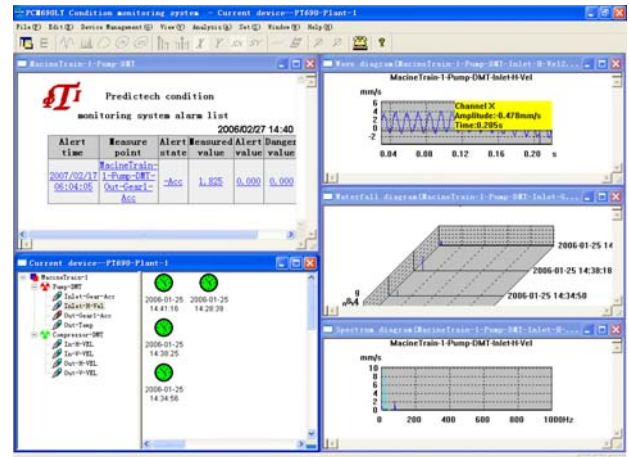
400 lines of resolution in spectrum

Route:

500 maximum points

Route can be configured for three hierarchy layers:

Machine-Train, Machine, and Measurement-Point



Each point can be configured to measure acceleration, velocity, and displacement or have a manual input. Manual hand input can be any number, such as, thrust position or process variable.

Each point has its own point ID with up to 12 letters or numbers.

Alarms:

Dual alarms for each measurement point

Display:

LCD 128 x 64 with blue backlight, 4 lines, 18 letter
PT690-DC will display point ID, last measurement data, current measurement data, unit, alarm status, and battery status

Power Converter:

90 - 250 VAC, 5W

Battery:

Li-H rechargeable battery 1100mAh

Measurement Error:

+/- 5%

Data Transfer:

Once the data collector receives the machine route and point configuration information, it uploads the last measured data to the host PC for in-depth analysis and data storage.

Memory:

RAM: 10Mb

ROM: Flash, 10Mb

Approval:

CE

Hazardous area PCEC approval: iaIICT4



Portable and Online Condition Monitoring Products

Physical

Temperature:

Operation: -20°C to + 65°C (-4°F to +140°F)

Storage: -40°C to + 85°C (-40°F to +185°F)

Dimensions:

180mm × 82mm × 53mm (7in × 3.2in × 2in)

Weight:

240g (0.5lb)

PCM690 Analysis Software

Basic Analysis:

Route

Running status on machine image

Trend plot

Alarm list

Overall vibration list

Advanced Analysis:

Waveform plot

Spectrum plot

Spectrum with standard waveform

Waterfall plot

Functions:

Marker

Zoom

Harmonics

Sideband

Works with multiple data collectors

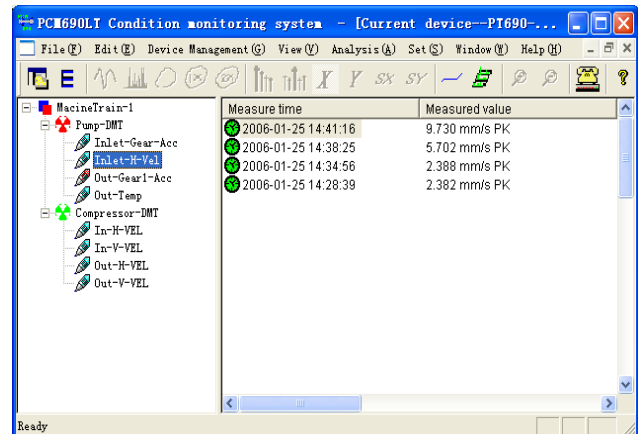
Print

System configuration

English or metric unit

Operation System:

Windows 2000 or Windows XP



Order Information

PT690-LT-K

The PT690 System with Data Collector and Analysis

Software Includes:

PT690-DC data collector

PCM690-LT windows analysis software

TM0782A accelerometer

PT690-CASE carrying case

PT600-TP accelerometer tip, 50mm

PT600-MG magnet for accelerometer

PT690-CB1 cable for data collector and PC

PT690-CB2 cable for accelerometer and data collector

PT690-CB3 cable for accelerometer and BNC port

PT690-USR user manual

PT690-DC-K

The PT690 Data Collector Kit Includes:

PT690-DC data collector

TM0782A accelerometer

PT690-CASE carrying case

PT600-TP accelerometer tip, 50mm

PT600-MG magnet for accelerometer

PT690-CB1 cable for data collector and PC

PT690-CB2 cable for accelerometer and data collector

PT690-CB3 cable for accelerometer and BNC port

PT690-USR user manual



Order Information Continued

PT690-DC

PT690 Data Collector Includes:

- PT690-DC data collector
- PT690-BAT rechargeable battery
- PT690-PWR power converter
- PT690-DC-CASE PT690-DC case

PCM690-LT

PT690 windows analysis software

Accessories

- TM0782A: Accelerometer
- PT690-CASE: PT690 system carrying case
- PT600-TP: Accelerometer tip, 50mm
- PT600-MG: Magnet for accelerometer
- PT690-CB1 cable for data collector and PC
- PT690-CB2 cable for accelerometer and data collector
- PT690-CB3 cable for accelerometer and BNC port
- PT690-BATT: Rechargeable battery
- PT690-PWR: Power converter
- PT690-DC-CASE: PT690-DC case
- PT690-USR: User manual
- PT690-PC: Laptop PC configured for PT690