F

Vibration Tester

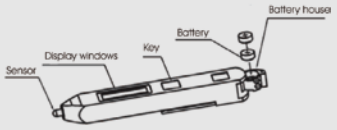
F1	Vibration Pen TIME®7120/7122/7126	P62
F2	Vibration Tester TIME®7212	P63
F3	Vibration Tester TIME®7230	P64
F4	Vibration Tester TIME®7231/7232	P65
F5	Vibration Tester TIME®7240	P66

TIME®7120/7122/7126

VIBRATION PEN

Standard Delivery

●Main unit	1
●Battery	2
●Protection pocket	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1



Features

●Prompt testing of vibration on the workshop machines and fast flaw detection of motor, electric fan, pump, compressor and machine tools to guard against mechanical malfunction

●Quick checking of unbalance misalignment, bearings and gears

●Lightweight Compact size with only bottom

●Low energy consumption, keep working for more than 4.5 hours continuously.

●Auto power off

●TIME®7120 for velocity testing

●TIME®7122 for displacement testing

●TIME®7126 for testing of acceleration, velocity and displacement

TIME®7120

TIME®7122

TIME®7126

Technical Specification

Model	TIME®7120	TIME®7122	TIME®7126
Parameters	RMS of vibration velocity (mm/s)	Displacement	Acceleration, Velocity, Displacement
Testing range	Velocity: 0.1mm/s~199.9mm/s	Displacement: 0.01mm~1.999mm (peak~peak)	Acceleration:0.1-199.9m/s^2(peak) Velocity: 0.1-199.9 mm/s (RMS) Displacement: 0.01-1.999 mm (peak-peak)
Frequency range	Velocity: 10Hz-1KHz, Acceleration: 10Hz-1KHz	Displacement: 10Hz~500Hz	Velocity: 10Hz~1KHz Displacement: 10Hz~500Hz Acceleration:10Hz~1KHz
Tolerance	±5%±2		
Display	3½digits LCD		
Power	Two button batteries(LR44 or SR44)		
Battery capacity	Approx. 4.5 hours working continuously		
Operating temperature	0℃~40℃		
Humidity	<85%		
Dimensions (mm)	150×22×18		
Weight (g)	55(including batteries)		

TIME®7212

VIBRATION TESTER

Features

- ●Fast flaw detection of motor, electric fan, pump, compressor and machine tools
- ●Convenient shortcut key combinations for calibration mode
- ●Memory of 100 groups data
- ●Upper /lower limits pre-setting and sound alarm
- ●Integrated with printer to print out all the current readings
- ●With function of time and date setting
- ●High sensitivity with measuring stability
- ●Low battery indication

Standard Delivery

- ● Main unit
- ● Sensor
- ● Magnetic base
- ● Charger
- ● TIME certificate
- ● Warranty card
- ● Instructuon manual

Optional Accessory

- ● Needle groupware

Technical Specification

Application field		Motor,compressor,bearing and other rotating machine
Measuring patameters		Acceleration(m/s^2),Velocity(cm/s),Displacement(mm)
Display resolution	Acceleration	0.1m/s^2
	Velocity	0.01cm/s
	Displacement	0.001mm
Tolerance		≤±5%
Testing range	Acceleration	0.1m/s^2 ~ 199.9m/s^2(peak value)
	Velocity	0.01cm/s-19.99cm/s
	Displacement	0.001mm-1.999mm (peak to peak)
Data memory		100 group
Voltage		6V
Charging time		≤132min
Power		Input:220V/AC,50hz Output:12V/DC,600mA
Continuous working time		>16hours
Temperature		0 ~ 40°C
Humidity		90%RH
Dimensions (mm)		230×84×33
Weight (g)		600

Standard Delivery

●Main unit	1
●Protection pocket	1
●Low sensitivity probe	1
●High sensitivity probe	1
●Power adapter	1
●Magnetic base	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1

Optional Accessory

●Needle groupware
●TA230 printer
●Dataview with communication cable

Features

●Two display modes: digital value mode and spectrum mode
●Large memory function: 100 x 100 measured results (100 testing points, 100 data can be stored in each testing points), 100 spectrograms (each testing point can store one spectrogram)
●Spectrogram can display in real time
●Histogram can be made according to the preset alarm line
●Upper /lower limits pre-setting and sound alarm if test results out of limitation, which leads to spectrum analysis mode automatically
●Connected to PC with advanced software for more analysis needs
●Integrated with printer to print out the testing result
●300 x 200 matrix LCD display with backlight
●Two probes for option: low and high sensitivity probes

Technical Specification

Measuring range	Low sensitivity probe	
	Acceleration	0.1m/s-392m/s (peak)
	Velocity	0.01cm/s-80cm/s (RMS)
	Displacement	0.001mm-18.1mm (peak-peak)
	High sensitivity probe	
	Acceleration	0.1m/s-20m/s (peak)
	Velocity	0.01cm/s-4cm/s (RMS)
	Displacement	0.001mm-0.8mm (peak-peak)
Frequency range	Low sensitivity probe:	
	Acceleration	10Hz-200Hz,10Hz-500Hz, 10Hz-1KHz,10Hz-10KHz
	Velocity	10Hz-200Hz, 10Hz-500Hz,10Hz-1KHz
	Displacement	10Hz-200Hz,10Hz-500Hz
	High sensitivity probe	
	Acceleration	10Hz-200Hz,10Hz-500Hz, 10Hz-1KHz,10Hz-10KHz
	Velocity	10Hz-200Hz, 10Hz-500Hz,10Hz-1KHz
	Displacement	10Hz-200Hz,10Hz-500Hz
Accuracy	±5%	
Power	Li battery (continuous working 20 hours without backlight)	
Temperature	0℃~40℃	
Humidity	≤80%RH	
Dimension (mm)	171× 78.5×28	
Weight (g)	230	

TIME®7230

VIBRATION TESTER

Standard Delivery

●Main unit	1
●Protection pocket	1
●Low sensitivity probe(only for TIME®7231)	1
●High sensitivity probe(only for TIME®7232)	1
●Power adapter	1
●Magnetic base	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1

Optional Accessory

●Dataview
●Needle groupware
●TA230 printer
●RS232 communication cable

Features

●Two display modes: digital value mode and spectrum mode
●Large memory function: 100 x 100 measured results (100 testing points, 100 data can be stored in each testing points), 100 spectrograms (each testing point can store one spectrogram)
●Spectrogram can display in real time
●Histogram can be made according to the preset alarm line
●Upper /lower limits pre-setting and sound alarm if test results out of limitation, which leads to spectrum analysis mode automatically
●Connected to PC with advanced software for more analysis needs
●Integrated with printer to print out the testing result
●300 x 200 matrix LCD display with backlight
●TIME®7231 equipped with low sensitivity probes, suitable for testing strong vibration
●TIME®7232 equipped with high sensitivity probes, suitable for testing weak vibration
●Conform to ISO 2954, GB/T13824, GB138233 Standards

TIME®7231/7232

VIBRATION TESTER

Technical Specification

Model		TIME®7231	TIME®7232
Measuring range	Acceleration	1m²/s ~392m²/s (Peak)	0.1m²/s ~20 m²/s (Peak)
	Velocity	0.1cm/s~80cm/s(RMS)	0.01cm/s~4cm/s(RMS)
	Displacement	0.01mm~18.1mm (Peak-Peak)	0.001mm~0.8mm (Peak-Peak)
Frequency range	Acceleration	10Hz~200Hz、10Hz~500Hz、10Hz~1KHz、10Hz~10KHz	
	Velocity	10Hz~200Hz、10Hz~500Hz、10Hz~1KHz	
	Displacement	10Hz~200Hz , 10Hz~500Hz	
Accuracy	±5%		
Power	Li battery (continuous working 20 hours without backlight)		
Temperature	0℃~40℃		
Humidity	≤80%RH		
Dimension (mm)	171× 78.5×28		
Weight (g)	230		

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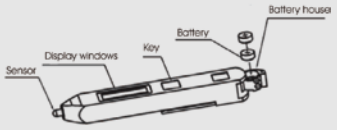
F5	Vibration Tester TIME®7240	P66

TIME®7120/7122/7126

VIBRATION PEN

Standard Delivery

●Main unit	1
●Battery	2
●Protection pocket	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1



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●Lightweight Compact size with only bottom

●Low energy consumption, keep working for more than 4.5 hours continuously.

●Auto power off

●TIME®7120 for velocity testing

●TIME®7122 for displacement testing

●TIME®7126 for testing of acceleration, velocity and displacement

TIME®7120

TIME®7122

TIME®7126

Technical Specification

Model	TIME®7120	TIME®7122	TIME®7126
Parameters	RMS of vibration velocity (mm/s)	Displacement	Acceleration, Velocity, Displacement
Testing range	Velocity: 0.1mm/s~199.9mm/s	Displacement: 0.01mm~1.999mm (peak~peak)	Acceleration:0.1-199.9m/s^2(peak) Velocity: 0.1-199.9 mm/s (RMS) Displacement: 0.01-1.999 mm (peak-peak)
Frequency range	Velocity: 10Hz-1KHz, Acceleration: 10Hz-1KHz	Displacement: 10Hz~500Hz	Velocity: 10Hz~1KHz Displacement: 10Hz~500Hz Acceleration:10Hz~1KHz
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Display	3½digits LCD		
Power	Two button batteries(LR44 or SR44)		
Battery capacity	Approx. 4.5 hours working continuously		
Operating temperature	0℃~40℃		
Humidity	<85%		
Dimensions (mm)	150×22×18		
Weight (g)	55(including batteries)		

TIME®7212

VIBRATION TESTER

Features

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- ●Integrated with printer to print out all the current readings
- ●With function of time and date setting
- ●High sensitivity with measuring stability
- ●Low battery indication

Standard Delivery

- ● Main unit
- ● Sensor
- ● Magnetic base
- ● Charger
- ● TIME certificate
- ● Warranty card
- ● Instructuon manual

Optional Accessory

- ● Needle groupware

Technical Specification

Application field		Motor,compressor,bearing and other rotating machine
Measuring patameters		Acceleration(m/s^2),Velocity(cm/s),Displacement(mm)
Display resolution	Acceleration	0.1m/s^2
	Velocity	0.01cm/s
	Displacement	0.001mm
Tolerance		≤±5%
Testing range	Acceleration	0.1m/s^2 ~ 199.9m/s^2(peak value)
	Velocity	0.01cm/s-19.99cm/s
	Displacement	0.001mm-1.999mm (peak to peak)
Data memory		100 group
Voltage		6V
Charging time		≤132min
Power		Input:220V/AC,50hz Output:12V/DC,600mA
Continuous working time		>16hours
Temperature		0 ~ 40°C
Humidity		90%RH
Dimensions (mm)		230×84×33
Weight (g)		600

Standard Delivery

●Main unit	1
●Protection pocket	1
●Low sensitivity probe	1
●High sensitivity probe	1
●Power adapter	1
●Magnetic base	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1

Optional Accessory

●Needle groupware
●TA230 printer
●Dataview with communication cable

Features

●Two display modes: digital value mode and spectrum mode
●Large memory function: 100 x 100 measured results (100 testing points, 100 data can be stored in each testing points), 100 spectrograms (each testing point can store one spectrogram)
●Spectrogram can display in real time
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●Integrated with printer to print out the testing result
●300 x 200 matrix LCD display with backlight
●Two probes for option: low and high sensitivity probes

Technical Specification

Measuring range	Low sensitivity probe	
	Acceleration	0.1m/s-392m/s (peak)
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	Displacement	0.001mm-18.1mm (peak-peak)
	High sensitivity probe	
	Acceleration	0.1m/s-20m/s (peak)
	Velocity	0.01cm/s-4cm/s (RMS)
	Displacement	0.001mm-0.8mm (peak-peak)
Frequency range	Low sensitivity probe:	
	Acceleration	10Hz-200Hz,10Hz-500Hz, 10Hz-1KHz,10Hz-10KHz
	Velocity	10Hz-200Hz, 10Hz-500Hz,10Hz-1KHz
	Displacement	10Hz-200Hz,10Hz-500Hz
	High sensitivity probe	
	Acceleration	10Hz-200Hz,10Hz-500Hz, 10Hz-1KHz,10Hz-10KHz
	Velocity	10Hz-200Hz, 10Hz-500Hz,10Hz-1KHz
	Displacement	10Hz-200Hz,10Hz-500Hz
Accuracy	±5%	
Power	Li battery (continuous working 20 hours without backlight)	
Temperature	0℃~40℃	
Humidity	≤80%RH	
Dimension (mm)	171× 78.5×28	
Weight (g)	230	

TIME®7230

VIBRATION TESTER

Standard Delivery

●Main unit	1
●Protection pocket	1
●Low sensitivity probe(only for TIME®7231)	1
●High sensitivity probe(only for TIME®7232)	1
●Power adapter	1
●Magnetic base	1
●TIME certificate	1
●Warranty card	1
●Instruction manual	1

Optional Accessory

●Dataview
●Needle groupware
●TA230 printer
●RS232 communication cable

Features

●Two display modes: digital value mode and spectrum mode
●Large memory function: 100 x 100 measured results (100 testing points, 100 data can be stored in each testing points), 100 spectrograms (each testing point can store one spectrogram)
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●Conform to ISO 2954, GB/T13824, GB138233 Standards

TIME®7231/7232

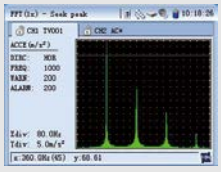
VIBRATION TESTER

Technical Specification

Model		TIME®7231	TIME®7232
Measuring range	Acceleration	1m²/s ~392m²/s (Peak)	0.1m²/s ~20 m²/s (Peak)
	Velocity	0.1cm/s~80cm/s(RMS)	0.01cm/s~4cm/s(RMS)
	Displacement	0.01mm~18.1mm (Peak-Peak)	0.001mm~0.8mm (Peak-Peak)
Frequency range	Acceleration	10Hz~200Hz、10Hz~500Hz、10Hz~1KHz、10Hz~10KHz	
	Velocity	10Hz~200Hz、10Hz~500Hz、10Hz~1KHz	
	Displacement	10Hz~200Hz , 10Hz~500Hz	
Accuracy	±5%		
Power	Li battery (continuous working 20 hours without backlight)		
Temperature	0℃~40℃		
Humidity	≤80%RH		
Dimension (mm)	171× 78.5×28		
Weight (g)	230		

TIME®7240

VIBRATION TESTER



FFT Mode

AVD Mode

Standard Delivery

● Main unit	1
● Vibration probe TSV-03	1
● Magnetic base	1
● Protection sheath for main unit	1
● Power adapter	1
● USB communication	1
● SD memory card(2G)	1
● TIME certificate	1
● Warranty card	1
● Instruction manual	1

Optional Accessory

- Photoelectric keyphasor transducer
- RS232 cable(for printing)
- TPUP-NH thermal printer
- Needle groupware

Features

- Three channels(CH1, CH2 and REV) available, the vibration of any two of the three directions(including X axis, Y axis and Z axis)can be tested.
- Five measuring modes: three parameters measuring (AVD mode), dynamic time domain waveform (TIME mode), dynamic spectrum measurement (FFT mode), data sampling (Sample mode), rotation speed measurement (REV mode).
- The peak value of acceleration, velocity and peak to peak value of displacement are measured.
- Preset the filter's cut-off frequency of pass band, frequency up to 100Hz.
- Dynamic display the vibration frequency and waveform in real time.
- Continuous data sampling last for 20 seconds
- Powerful data memory management: up to 50 points' infinite data, the measured data of each point is stored in files, users can review the vibration parameters, waveform, frequency data sampling and rotation speed.
- Connected with printer to print out measured data, waveform and spectrum chart.
- Photoelectric transducer for high accurate rotation speed
- Self-diagnosis for malfunction: Alarm sets off if test results out of warning line
- Safe and reliable long-life Li battery with self-protect equipment
- Color LCD display, auto shutdown and buzz alarming

Technical Specification

Sensitivity of Acceleration transducer (mVrms/g)	Acceleration (m/s^2)	Velocity(mm/s)	Displacement(μm)
1.0~9.9	1-2,000	1-2,000	10-20,000
10~99	0.2-200	0.2-200	5-2000
Frequency range	Acceleration:5Hz~10000Hz		
	Velocity:5Hz~1000Hz		
	Displacement:5Hz~500Hz		
Rotation Speed	300~60000RPM		
Tolerance	±5%		
Battery	Li battery(continuous working for 8hours)		
Operating temperature	0℃~40℃		
Humidity	≤80%RH		
Dimensions (mm)	223×122×38		
Weight (g)	606		