

*Acceleration/Velocity/Displacement*

# VIBRATION CONTROLLER/MONITOR

Model : PVB-8219

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

# Acceleration/ Velocity/ Displacement VIBRATION CONTROLLER/MONITOR

## Model : PVB-8219

### FEATURES

* Applications for industrial vibration monitoring : All industrial machinery vibrates. The level of vibration is a useful guide to machine condition. Poor balance, misalignment & looseness of the structure will cause the vibration level increase, it is a sure sign that the
* Frequency range 10 Hz - 1 KHz, sensitivity relative meet ISO 2954.
* Professional vibration meter supply with vibration sensor & magnetic base, full set.
* Metric & Imperial display unit.
* Acceleration, Velocity, Displacement measurement.
* RMS measurement.
* Wide frequency range.
* Separate vibration probe with magnetic base, easy operation.
* Control setting, Hi/Lo alarm setting.
* Control relay output, alarm relay output.
* Control Relay will make action when the reading value reach to control value.
* Alarm Relay will make action when the reading value reach to high/low alarm value.
* Hysteresis value setting for control and alarm function.
* Microprocessor circuit ensures high accuracy and provides special functions and features.
* Power : 90 ACV to 260 ACV, 50/60 Hz.
* RS-232/USB computer interface.
* DIN size : 96 x 48 mm. Depth : 110 mm.
* Optional USB cable, USB-01.
* Optional data acquisition software, SW-U801-WIN.

### GENERAL SPECIFICATIONS:

Circuit	Custom single-chip microprocessor LSI circuit		
Display	4 digits red LED, digit size : 14 mm.		
Measurement	* Acceleration * Velocity * Displacement(p-p)		
Display units	Measurement	Metric	Imperial
	Acceleration	m/s <sup>2</sup>	ft/s <sup>2</sup>
	Velocity	mm/s	inch/s
	Displacement	mm	inch
Frequency range	10 Hz to 1 KHz * Sensitivity relative during the the frequency range meet ISO 2954		
Offset adjust	It can make the internal Offset setting		
Gain adjust	It can make the internal Gain setting		
Sampling Time	Approx. 1 second.		
Relay Output	Number	2 relays	
	Function	Relay 1 : Control relay. Relay 2 : High/Low alarm relay.	
	Max load	0.5 ACA/250 ACV 0.5 DCA/24 DCV * Do not apply the relay contact load current > 0.5 A, otherwise the relay may be damaged permanently without warranty.	

Setting Function	1st layer setting procedures	CtLo (Control low limit) CtHi (Control high limit) ALLo (Alarm low limit) ALHi (Alarm high limit)
	Second layer setting procedures	FILT (Digital filter) CtHy (Control hysteresis set) ALHy (Alarm hysteresis set) oFSt (Offset adjustment) GAin (Gain adjustment) Unit (Unit set)
Data Output	RS 232 PC serial interface.	
Operating temperature	0 to 50°C ( 32 to 122°F ).	
Operating humidity	Less than 80% R.H..	
Power Supply	90 to 260 ACV, 50/60 Hz.	
Power consumption	Approx. 2.6 VA/AC 110V. Approx. 5.1 VA/AC 220V.	
Weight	272 g/ 0.6 LB.	
Dimension	DIN size : 96 x 48 mm, Depth : 110 mm.	
Accessories included	* Instruction manual.....1 PC * Vibration sensor with cable.....1 PC * Magnetic base..... 1 PC * Case holder with screw..... 2 PCs	
Optional Accessories	* USB cable,USB-01. * RS232 cable,U PCB-02. * Data Acquisition software,SW-U801-WIN. * Real time SD card data logger DL-9602SD	

### ELECTRICAL SPECIFICATIONS (23 ± 5 °C)

#### Acceleration(RMS)

Unit	Range	Resolution	Accuracy
m/s <sup>2</sup>	0.5 to 199.9 m/s <sup>2</sup>	0.1 m/s <sup>2</sup>	± ( 5 % + 2 d ) reading
ft/s <sup>2</sup>	2 to 656 ft/s <sup>2</sup>	1 ft/s <sup>2</sup>	@ 160 Hz, 80 Hz, 23 ± 5 °C

#### Velocity(RMS)

Unit	Range	Resolution	Accuracy
mm/s	0.5 to 199.9 mm/s	0.1 mm/s	± ( 5 % + 2 d ) reading
inch/s	0.02 to 7.87 inch/s	0.01 inch/s	@ 160 Hz, 80 Hz, 23 ± 5 °C

#### Displacement(peak-peak)

Unit	Range	Resolution	Accuracy
mm	0.005 to 1.999 mm	0.001 mm	± ( 5 % + 2 d ) reading
inch	0.000 to 0.078 inch	0.001 inch	@ 160 Hz, 80 Hz, 23 ± 5 °C

\* Appearance and specifications listed in this brochure are subject to change without notice.

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