

TES

Reliable in Quality

TES-3100/3101/3102 VIBRATION METER

- ❑ Measures Acceleration, Velocity and Displacement
- ❑ RMS, EQ PEAK and EQ P-P measurement
- ❑ Wide range of vibration measurement
- ❑ Using different sensitivity of accelerometers
- ❑ Maximum/Minimum record function
- ❑ USB interface allows transfer of saved data to PC (3101, 3102)
- ❑ Manual memory stores up to 100 data
- ❑ Auto memory micro SD card 4GB (3101, 3102)
- ❑ Earphone output for detecting noise in machine components



3101/3102



PA-01
3100/3101/3102



PA-02
3102





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3100/3101/3102 VIBRATION METER

SPECIFICATIONS

Piezoelectric Accelerometer PA-01 (3100, 3101, 3102)	
Sensitivity	5mV/(m/s ²)(±10%)
Acceleration range	100 g pk(980m/s ²)
Amplitude nonlinearity	<=5%
Frequency response	10Hz to 1kHz (±10%), 1kHz to 15kHz (±3dB)
Resonance frequency	>=15 kHz
Transverse sensitivity	<=5%
Dimensoins/Weight	46(H) x 17(D) mm / 45 g
Piezoelectric Accelerometer PA-02 (3102)	
Sensitivity	10mV/(m/s ²)(±10%)
Acceleration range	50 g pk(490m/s ²)
Amplitude nonlinearity	<=2%
Frequency response	10Hz to 1kHz (±10%), 1kHz to 10kHz (±3dB)
Resonance frequency	>=15 kHz
Transverse sensitivity	<=5%
Dimensoins/Weight	50(H) x 20(D) mm / 78 g
Measurement range (using PA-01 or PA-02)	
ACC (Acceleration)	0.02 to 200m/s ² EQ PEAK 1Hz to 5kHz
VEL (Velocity)	0.3 to 1000mm/s RMS 3Hz to 1kHz
	0.1 to 1000mm/s RMS 10Hz to 1kHz
DISP (Displacement)	0.02 to 100mm EQ PEAK 3Hz to 500Hz
	0.001 to 100mm EQ PEAK 10Hz to 500Hz
Frequency range	
ACC (Acceleration)	3Hz to 1kHz, 3Hz to 5kHz, 1Hz to 100Hz, 3Hz to 20kHz
VEL (Velocity)	10Hz to 1kHz, 3Hz to 1kHz
DISP (Displacement)	1Hz to 500Hz, 3Hz to 500Hz
Measurement full-scale range	
For accelerometer PA-01 and accelerometers with sensitivity	1.0 to 9.9mV/(m/s ²)
ACC (Acceleration)	1, 10, 100, 1000m/s ²
VEL (Velocity)	10, 100, 1000mm/s
DISP (Displacement)	0.1, 1, 10, 100mm
Indication characteristics	
Acceleration	RMS, EQ PEAK
Velocity	RMS, EQ PEAK
Displacement	RMS, EQ PEAK, EQ p-p
Gain calibration (Accelerometer sensitivity selection establishes suitable gain)	
Setting range	0.10 to 0.99, 1.0 to 9.9, 10 to 99mV (m/s ²)
Ambient conditions for operation	
Accelerometer	-20 to +70°C , max. 90%RH
Main unit	-10 to +50°C , max. 90%RH
Manual memory	Maximum 100 data can be stored manually
Auto memory (3101, 3102)	Micro SD CARD 4GB
Power requirements	4 IEC R6 (size AA) batteries, AC adapter 6V (option)
Battery life (continuous use)	8 hours (approx.)
Dimensions / Weight	155(L) x 78(W) x 40(H)mm
Supplied accessories	Instruction manual, Battery,(CD software, Micro-USB cable) → (3101, 3102)



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