

# **TES** 3100 VIBRATION METER

## FEATURES

- Measures acceleration, Velocity and displacement
- RMS, EQ PEAK and EQ P-P measurement
- Wide range of vibration measurement by using different sensitivity of accelerometers
- Excellent accelerometer for harsh environments
- Maximum/Minimum record function
- Earphone output for detecting noise in machine components
- Manual memory stores up to 99 data

## SPECIFICATIONS

Piezoelectric Accelerometer (PA-01)	
Sensitivity	5mV/(m/s <sup>2</sup> )(±10%)
Acceleration range	200m/s <sup>2</sup>
Amplitude nonlinearity	±1%
Frequency response	5Hz to 10kHz (±10%), 10kHz to 15kHz (±3dB)
Resonance frequency	27kHz
Transverse sensitivity	≤ 5%
Dimensions/Weight	46(H) x 19(D) mm / 46g
Measurement range (PA-01)	
ACC (Acceleration)	0.02 to 200m/s <sup>2</sup> 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 <sup>2</sup> )
ACC (Acceleration)	1, 10, 100, 1000m/s <sup>2</sup>
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 <sup>2</sup> )
Ambient conditions for operation	
Accelerometer	-20 to +70°C, max. 90%RH
Main unit	-10 to +50°C, max. 90%RH
Manual memory	Maximum 99 data can be stored manually
Power requirements	4 IEC R6 (size AA) batteries, AC adapter 6V (option)
Battery life (continuous use)	8 hours (approx.)
Dimensions / Weight	158(L) × 78(W) × 40(H)mm / 286g
Supplied accessories	Instruction manual, Battery



## TES ELECTRICAL ELECTRONIC CORP.

7F, No. 31, Lane 513, Rui Guang Road, Neihu Dist. Taipei. Taiwan, R. O. C.

Tel: (02) 2799-3660

Fax: 886-2-2799-5099

E-Mail: tes@ms9.hinet.net

http://www.tes.com.tw