

The Tekneka VBC390 Vibration Calibrator is a versatile and compact device that delivers high-precision vibration calibration. Using potentiometers, it generates standard sine signals from 10Hz to 1280Hz with adjustable amplitude for acceleration, velocity, and displacement. It is a battery-powered device designed for precise vibration testing and calibration. Featuring a digital display for easy monitoring, it supports both horizontal and vertical vibration generation. This all-in-one unit integrates a sine signal generator, power amplifier, standard transducer, vibration meter, and shaker, making it an essential tool for laboratory and on-site applications. With high accuracy and user-friendly operation, the VBC390 is ideal for vibration analysis, equipment maintenance, and industrial monitoring professionals.

### Features

- **Wide Frequency Range:** Define sine signal vibrations at selectable frequencies
- **Digital Displays:** Accurate and clear readings of acceleration, velocity, and displacement
- **Dual Vibration Modes:** Supports both horizontal and vertical vibration generation
- **Integrated Design:** Combines multiple functionalities in one compact unit
- **Battery-Powered:** Ensures portability and convenient use in both lab and field environments
- **User-Friendly Operation:** Easy controls for seamless calibration processes

### Applications

- **Machine Maintenance:** Ensures vibration sensors on industrial machinery are accurately calibrated
- **Research Laboratories:** Validates the performance of vibration analysis instruments
- **On-Site Equipment Testing:** Performs quick calibrations during field inspections
- **Sensor Manufacturing:** Calibrates and tests vibration sensors for accuracy and reliability
- **Quality Assurance:** Supports product testing in industries such as automotive, aerospace, and electronics



### Maximum Vibration Amplitude and Maximum Load

	≤100g			≤250g			≤650g		
	a(m/s <sup>2</sup> )	v(mm/S)	d(μm)	a(m/s <sup>2</sup> )	v(mm/S)	d(μm)	a(m/s <sup>2</sup> )	v(mm/S)	d(μm)
10Hz	2.5	28	1300	3.5	40	1800	4	45	2000
20Hz	15	85	1900	10	60	1300	5	28	640
40Hz	60	170	2000	35	100	1100	12	35	380
80Hz	100	141	800	40	60	320	14	20	110
160Hz	75	53	150	35	25	70	12	8.5	24
320Hz	50	18	25	30	10	15	10	3.5	5
640Hz	30	5	3	20	3.5	2	6	1	*
1280Hz	23	2	*	10	0.9	*	5	0.4	*

Description	Ranges	Accuracy
Frequency	10Hz to 1280Hz	±0.01%
Acceleration (100m/s <sup>2</sup> pk)	40Hz to 320Hz	±3% + 1digit
	320Hz to 1280Hz	±5% + 1digit
Velocity (170mm/sec RMS)	40Hz to 640Hz	±5% + 1digit
Displacement (2000μm pk-pk)	40Hz to 320Hz	±5% + 1digit
Proximity Probe Linearity	0 to 2.0mm (5mm and 8mm probes)	
Display	3½ digit (Acceleration, Velocity or Displacement)	
Operating   Storage Temp	0 to 50°C   -20 to 70°C	
Power Source	In-built battery (upto 8hrs run), Power supply	
Dimensions	300 x 250 x 210mm	
Weight	5.5kg	

### Packing Includes

- Proximity Probe Linearity Calibration Kit
- IEPE Conditioner
- Power Cable
- Test Report



### Ordering Info

VBC390..... Vibration Calibrator