

## GJX-3 VIBRATION CALIBRATOR

The GJX-3 Vibration Calibrator is a versatile instrument designed for calibrating vibration sensors, including accelerometers, velocity transducers, proximity transducers, and vibration measuring instruments. It generates standard sine wave signals at selectable frequencies of 10, 20, 40, 80, 160, 320, 640, and 1280 Hz. The amplitudes of acceleration, velocity, and displacement can be adjusted using dedicated potentiometers and are clearly displayed on digital readouts. The calibrator is capable of generating both horizontal and vertical vibrations to suit various testing requirements.

### Key Features:

- Integrated sine signal generator, power amplifier, standard transducer, and shaker in a compact unit
- High accuracy with easy and intuitive operation
- Adjustable parameters for acceleration, velocity, and displacement
- Suitable for use in both laboratory and on-site environments
- Compact design for enhanced portability

The GJX-3 is an ideal solution for professionals seeking reliable and precise vibration calibration across a wide range of applications.

### Specifications :

**Frequency:** 10, 20, 40, 80, 160, 320, 640, 1280Hz +0.01%

#### Amplitude accuracy:

|                                       |                                |
|---------------------------------------|--------------------------------|
| Acceleration (@30m/s <sup>2</sup> pk) | 40Hz to 320Hz + 0.3dB + 1digit |
|                                       | 20Hz to 640Hz ± 0.5dB + 1digit |
| Velocity (@25mm/sec pk)               | 40Hz to 320Hz ± 0.5dB + 1digit |
| Displacement (@50µm pk-pk)            | 40Hz to 320Hz ± 0.5dB + 1digit |

#### Proximity probe linearity calibration kits (optional)

Probe: 5mm and 8mm probes      Range: 0~2.0mm

**Display:** High-precision 3½-digit digital display for amplitude



### Maximum vibration amplitude and maximum load

| Wt<br>Freq | ≤100g                |         |       | ≤250g                |         |       | ≤500g                |         |       |
|------------|----------------------|---------|-------|----------------------|---------|-------|----------------------|---------|-------|
|            | 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     | *     |

**Size:** 300 x250 x210(mm)

**Net Weight:** 5.2 kg

**Operating Temperature:** -20°C ~ 50°C

**Storage:** -40°C ~ 70°C

**Power Input Voltage:** 220VAC standard / 110VAC optional