INFRA C22 WIRELESS TRIAXIAL VIBRATION MONITOR

Applications

The INFRA C22 is a wireless triaxial vibration monitor with a built-in geophone, typically designed to measure vibration during construction activities.

The built-in geophone measures and records Peak Particle Velocity (PPV) from the vibration source.

The measurements are assessed to ensure construction work does not exceed thresholds likely to cause damage to neighbouring buildings and infrastructure.

This rugged sensor has a built-in digital processor, which measures all incoming data in real time.

The data is processed to GEO-Instruments 'QuickView' monitoring platform for analysis.

Configurable to comply with UK and European standards.

Typical vibration monitoring applications include:

- Construction and infrastructure projects in urban areas.
- Verification of impact on people and residences.
- Monitoring ground vibration during construction to ensure the safety of surrounding structures and buildings
- Monitoring the impact of piling to surrounding structures and sensitive receptors

Installation & Operation

The C22 wireless vibration monitor is typically very easily installed. The unit is installed using a single M6 bolt via the horizontal or vertical mounting hole.

Prior to installation, the sensor is pre-configured specifically to its project within the GEO-Instruments 'QuickView' monitoring platform and site personnel have remote access to the measurement results immediately.

The C22 has a side keypad and colour display located at the top of the unit for user interface purposes.

The display allows for a user-friendly transition into monitoring mode. Once installed, monitoring mode is started by pressing 2 buttons on the side of the instrument's keypad.

The pre-configured trigger levels will register on the project's web-based platform and any trigger breaches will be sent by email or SMS to registered users.

Specifications

Sensor Type:
- Triaxial geophone

Communication:
- Built in 4G modem

Range:
- Frequency range 1 Hz - 500 Hz.

Maximum Vibration Level:
- 250 mm/s

Resolution:
- 0.01 mm/s

Temp Rating:
- -20 to +50 °C

Dimensions:
- 146 x 127 x 89 mm

Enclosure:
- Aluminium IP67 – Weather proofed by O-rings in all seams

Weight:
- 1.8 kg

Key Advantages

Meeting Key Requirements:
Compliant to British Standards BS7385 & BS5228.

Automated and Low Maintenance:
Provides up to 4 months operation on rechargeable batteries.

Reliable Calibration:
Recommended every 24months for long term projects.