Managing and monitoring the levels of vibration on a construction site has never been easier with the event based NanoULTRA – Vibe. It has been carefully designed to be robust for use in harsh environments such as construction sites, yet simple to use and sensitive enough to capture ongoing vibration events. The NanoULTRA – Vibe offers wireless mobile connectivity, long battery life (usually 1 - 2 months), trigger alarming (email and SMS), and constant access to data to our secure cloud platform, the CDLSmartHub™, where the raw data can be turned into actionable insights.

From the CDLSmartHub™ you can configure and manage your units, set alarms, view audit trails, integrate and export data, view trends and visualise data. Investing in the NanoULTRA – Vibe and CDLSmartHub™, gives you access to a fully integrated end-to-end IoT solution to effectively manage your assets.

Here at CDL we understand the requirements of being on a construction site. The NanoULTRA -Vibe continuously monitors at high speed and records vibration events over pre-set thresholds set by the user on the CDLSmartHub™ in line with your requirements. If you are unsure if this meets your onsite needs, please give one of our IIoT Solution specialists a call for more information.

KEY FEATURES

- Vibration event capture
- Heart beat logins to the CDLSmartHub
- Receive SMS and email alarms when vibration limits are exceeded
- Add users and alarm recipients via a secure web browser.
- Input for up to two tri-axial geophone sensors
- Average battery life 1-2 months
- Remote monitoring reducing on-site requirements
- Minimum trigger level: 0.18mm/s
- Maximum sensor level: 43.4mm/s
- Geophone low frequency response: 4.5 Hz
- Operating temperature: -5 to + 60 C
- Quad band Modem
- Roaming SIM Card
- PPV reporting

APPLICATIONS

- Construction site application
- Geographical vibration measurements
- Ground vibration detection
- Piling Installation
- Building stability
- Demolition impact
**Physical**
- IP66 die cast aluminium
- 178 x 156 x 74
- IP66 rated enclosure

**Power Supply**
- Battery powered by 2 x D cell 3.6 V as standard
- Mains powered AC 240V to 12VDC power supply or 8-18V DC (Optional)

**Indicative Battery Supply**
- Dependent on sample rate, temperature and range
- Battery longevity of up to 4 months available

**Standard On-board Inputs**
- Geophone input options: 1 or 2, 3 axis
- Natural Frequency sensitivity range: 4.5 Hz, 8 Hz, 10Hz, 14 Hz
- Geophone on standard 3m cable

**Modem**
- LTE: Twelve band, 700 (Bd12 <MFBI Bd17>, Bd28) 800 (Bd18, Bd19, Bd20) 850 (Bd5) / 900 (Bd8) / AWS (Bd4) / 1800 (Bd3) / 1900 (Bd2) / 2100 (Bd1) / 2600 (Bd7)
- UMTS/HSPA+: Seven band, 800 (BdXIX) / 850 (BdV) / 900 (BdVIII) / AWS (BdIV) / 1800 (BdIX) / 1900 (BdII) / 2100MHz (BdI)
- GSM/GPRS/EDGE: Quad band, 850/900/1800/1900 MHz

**Antenna and Connector**
- Puck mount on aluminum case fitted as standard

**LEDs and Button**
- Internal on/off switch
- LED’S for modem activity and triggered status

**Environmental**
- -10 to +75 °C (operational)
- -20 to +85 °C (storage)

**Approvals**
- CE

**NanoULTRA – Vibe Configuration and Management**

The NanoULTRA – Vibe transfers data to the CDLSmartHub™ as soon as the unit is powered up. All configuration is performed via CDLSmartHub™ to the NanoULTRA – Vibe

**Options include ( s, seconds, m, minutes, h, hour)**
- Sample Rate
  - 5s, 10s, 15s, 30s, 1m, 2m, 5m, 10m, 15m, 30m, 1h, 2h, 3h, 6h, 12h or 24h.
- Report rate
  - (m, minutes, h, hours) 1m, 2m, 5m, 10m, 15m, 30m, 1h, 2h, 3h, 6h, 12h, 24h, 48h or 1 week.
- Fast Sample frequency options (Hz) 10, 25, 50, 75, 100, 150, 200, 250, 300, 350, 400, 450, 500.

On board non-volatile memory to store sensor data if power or signal is lost.

**CDLSmartHub™**

For live examples of the CDLSmartHub™ please visit: https://www.captiondata.com/products/cdlsmarthub/

Web based configuration of remote NanoULTRA – Vibe
- User management
- Alarm management and audit trails
- Trending of data

**Starter Kit – Battery Unit**
- NUV-BAT = NanoULTRA – Vibe Battery
- NUV-GEO = vibration Geophone sensor
- NUV-CSH = CDLSmartHub™ 12 month

**Starter Kit – Mains power Unit**
- NUV-PSU = NanoULTRA – Vibe PSU
- NUV-GEO = vibration Geophone sensor
- NUV-CSH = CDLSmartHub™ 12 month

**Contact Info**
- Telephone: +44(0)1905 754078
- Email: solutions@captiondata.com