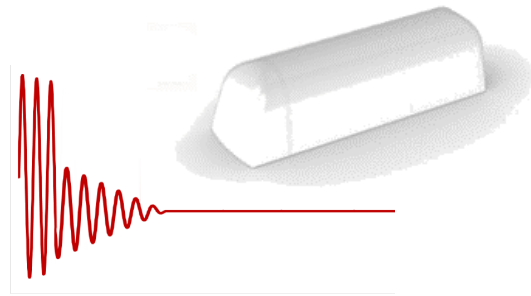




Minimalistic sensor for vibration detection applications



Headline features:-

DATA SHEET

Part number:- 003-ADA-001

- Battery powered for up to 5 Years
- On board temperature (°C)
- On board humidity
- Seamless integration with the CDL SmartHub IoT
- Detects vibration levels that are above pre-set thresholds
- Simple, efficient set up
- Small form factor (about the size of a USB memory stick)



Cloud based IoT platform



LoRa wireless sensor network



5km line of sight



Email and SMS alerts

Mode of operation:-

The wireless sensors communicate to the Matrix+ gateway and then to the CDLSmartHub™ IoT platform. The sensors are ideally suited to covering wide, distributed areas giving high levels of confidence assets are not being damaged by excess levels of vibration.

The sensors monitor for vibration levels at high speed and will count the amount of 'vibration events' over a given period. When the sensor reports into the CDLSmartHub™, alerts can be generated via sms/email to configured recipients.

Each sensor can be named in the platform which will be included in the alert message allowing you to take corrective action.

Sensor settings:-

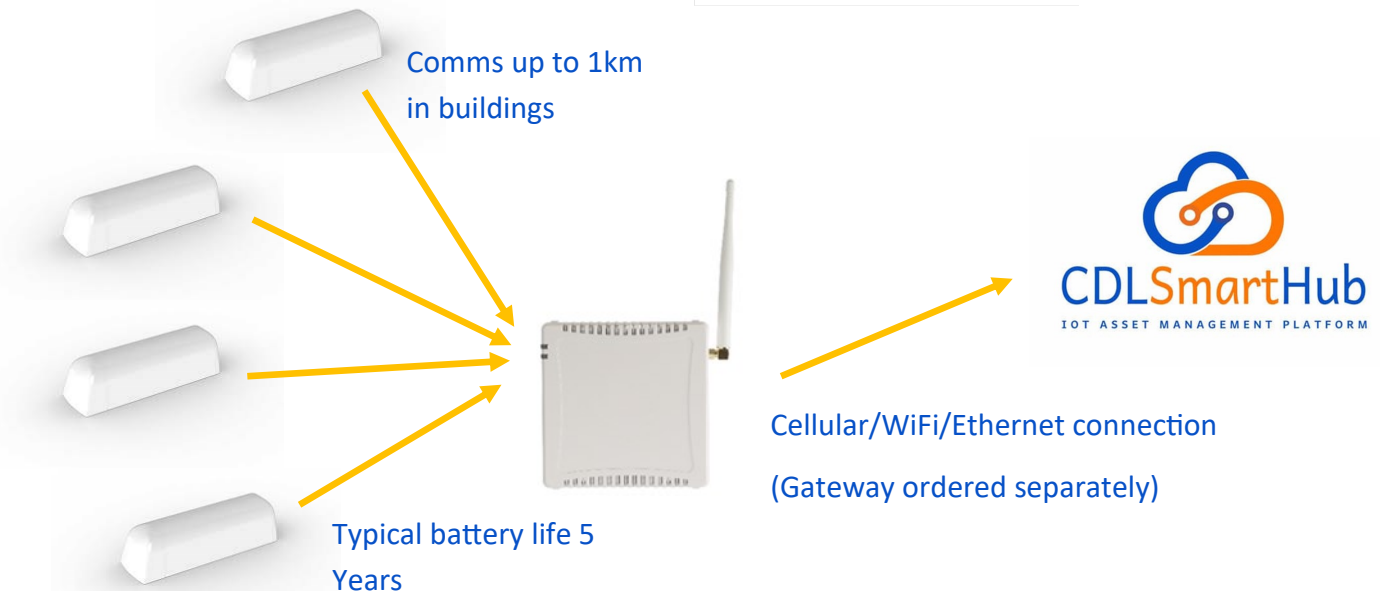
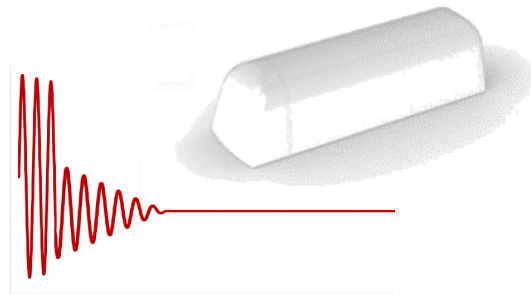
Each sensor is preconfigured at CDL and fully tested. The settings include:-

1. How often the sensor reports into the CDLSmartHub™ (typically 10 minute intervals)
2. The vibration threshold level, this can be set between 0.1 and 1g

Nano ULTRA-Matrix +

WIRELESS MULTI - SENSOR CLOUD SOLUTION

Minimalistic sensor for vibration detection applications



Measurements delivered to CDLSmartHub™

Last Measured Values

Input	Value	Alarm Low	Alarm High
Temperature	18.5°C	10	25
Humidity	55.0%		
X	-3.0		
Y	0.0		
Z	63.0		
X	-0.05G		
Y	0.00G		
Z	1.00G		
vdd	3.6V		
Pulse Abs	17.0		
Digital	0.0		
Acc Motion	0.0		
Waterleak	0.0		



Plot any measurement from construction site within a standard browser. Easily share key data with end client.

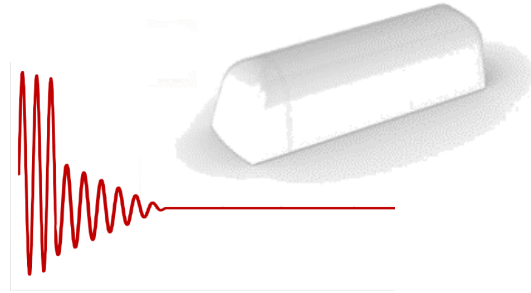
This is the key measurement that will count vibration events above configured threshold. This count will be reset each time the sensor delivers its data to the SmartHub. If the alarm threshold is set to '1' then a single event will send alerts to all configured recipients. Alerts can be transmitted via email and/or sms

Sensor Specification

Dimensions	21.2 * 74.9 *20.8
Housing material	Plastic, PC/ABS
Operating temperature	0 – 40°C 0-85%RH, Non Condensing *
On board humidity accuracy	Accuracy: ±2%
On board temperature accuracy	Accuracy: ±0.3°C (typical)
Battery type	Battery powered by 1 x AA 3.6 V lithium battery
Accreditations	CE/FCC



Minimalistic sensor for vibration detection applications



Set up procedure

Step 1—Power up base unit



- Ideally situate the gateway centrally on the install
- Once plugged in, the green LED should go solid. This indicates a connection has been established

Step 2—Force log in from sensor and check on SmartHub



- The battery is pre installed
- Wipe small magnet along each edge of sensor to force login
- Check 'last seen' on SmartHub (See next step)
- *Please note:- The sensor message is directed to the SmartHub via the gateway, if the gateway is not connected, the sensor will not be able to function*

Step 3—Check updated values on SmartHub and name sensor

ID	A81758FFFE04936F
Model	
Name	JC Kitchen
Last Seen	2021-01-30 10:46:05
Quick Links	<ul style="list-style-type: none"> • Reporting • Map
Company/Dept	CDL Matrix + demo

- You can access the sensor direct by scanning the QR code on the sensor
- If you do not have log in details, please contact your system administrator
- You will see a 'last seen' date/time on the login page, this should be a recent value, if not repeat the step 3