

ENVIRONMENTAL MONITORING FROM OPTI-CAL







Introduction to Guardian 2 & Casella 24/7 Data Management System

Patrick Hughes





Our solution, The Guardian 2



- A fully automated, continuous monitoring system
- Section 61 compliant
- A fit and forget solution for the contractor
- All in one system with noise, dust, vibration, wind speed & wind direction sensors
- Remote activation/deactivation of sensors
- Programmable email and SMS alerts for parameter breaches



Noise Monitoring



- IEC61672-1 & 3 compliant noise measurements for accurate results over several parameters
- Class 1 microphone
- Data presented in multiple formats to match customers requirements
- Near real-time alerts for parameter breaches



Dust & Particulate monitoring



- Optical light scatter particulate counter
- Simultaneous monitoring of PM10, PM2.5 & PM1 particulate sizes
- Particulate atmospheric dump, post measurement
- Pump and filter less system, minimising maintenance
- Heated inlet to eliminate false readings
- Near real-time email & SMS alerts



Vibration Monitoring



- BS5228, BS4866, BS7358 and DIN4150 compliant
- 3 axis Geophone
- Resolution 0.01mm/s
- IP65 sensor
- Near real-time alerts via email & SMS
- Ground or façade anchored



Wind Speed & Wind Direction



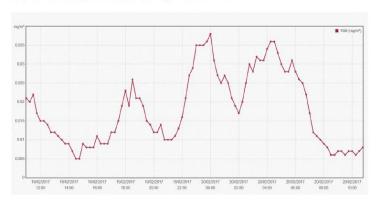
- Solid state sensor with no moving parts
- Accuracies of +/- 2%
- Speed and direction from a single unit
- Easy set up
- Near real-time alerts via email & SMS



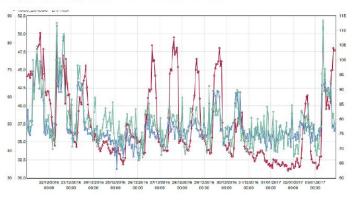
Reports

LAPOR

Report showing 15 minute average PM10 levels



Report showing noise data over two weeks



- Automatically sent via email on a daily basis or frequency to suit requirements
- Separate reports for each sensor.
- Easy to manage data, clear & concise
- Multiple formats



What's Next?



- VOC (volatile organic compounds)
- Gases No/Nox
- Let us know what you want



Portable Vibration Monitoring- M80



- Up to 8 Month Battery Life
- 3G/2G modem for quicker access to results
- Sleek design with built in spirit level
- Compact and Portable
- Automatic SMS and email alerts
- Remote access
- Web based system



Market Sectors

Both products are ideally suited

- Demolition projects
- Inner city developments
- Deep excavations
- Land remediation
- New build contractors
- Groundworkers & Civils

- Any works around buried services
- Piling contractors
- Any projects adjacent to Rail (vibration)

