



## Casella BOUNDARY Guardian



### Ensure compliance through remote monitoring of noise and dust.

BOUNDARY Guardian is a web-based remote monitoring system for noise and/or dust emissions from construction, demolition or process sites to ensure compliance with regulatory limits.

#### Applications

- Factory dust monitoring
- Demolition phase monitoring
- Construction sites
- Roadside / traffic monitoring
- Waste transfer stations
- General compliance monitoring
- Site monitoring strategies
- Planning guidance monitoring
- Section 61 compliance (UK)
- PPG24 compliance (UK)

#### Key features

- Real time dust (PM10, PM2.5 or TSP) and noise levels (LAeq, LAFmx)
- IEC61672-1 Compliant Sound Level Meter
- Heated inlet to reduce moisture interference
- Proven dust measurement technology
- Maintenance free wind speed and direction sensor (optional)
- Noise percentile readings (e.g. L90)
- Email and text alarms for exceeded noise and dust levels
- Web hosted data with a secure private login
- 'Noise' or 'dust' only versions



# The only on-site and boundary monitor you will ever need

Casella BOUNDARY Guardian for boundary and site monitoring applications provides simultaneous, remote monitoring of dust, noise, wind speed and direction.

Local alarms and email can be transmitted to site managers if dust or noise limits are exceeded.

The first simultaneous multi parameter monitor for dust and noise manufactured in the UK from a single manufacturer.

The system can be purchased with any combination of noise, dust, wind speed and direction to meet your site's requirements.

## Environmental dust and noise compliance made easy

### Data Anytime and Anywhere

- Access your data via any web browser
- Receive real-time e-mail alerts
- Extract data and produce reports easily

The data is transferred via GPRS to a dedicated, secure, website [www.dataview247.com](http://www.dataview247.com). This can be viewed in any web browser, via private login, showing real-time and historical data and in addition real-time alarms can be set up via email.

Reports can be easily created for multiple parameters: Noise: LAeq, LA<sub>max</sub>, LA<sub>10</sub>, LA<sub>90</sub>. Dust: PM<sub>10</sub>, PM<sub>2.5</sub> or TSP levels as well as wind speed and direction; all over selectable time periods.

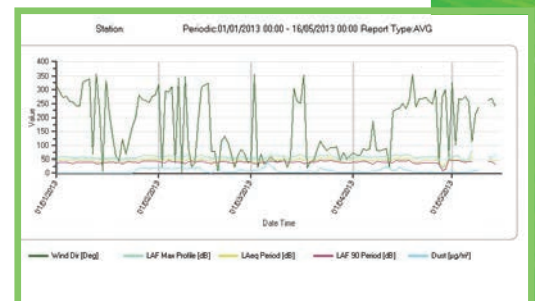
Maps
Dynamic Table
Reports
Station Report
Multi Station Report
Wind Rose
Polar
XY / 2Y
Histogram
Index
Percentile Report
Operational Reports
Information Reports
Publications
Links
About
Log out

Simple menu structure

*Altin Lleshi, Safety, Health & Environment Advisor with Keltbray, explains: "We were working on a project at Mitre House in the City of London in close proximity to a private educational institution, where the dust and noise associated with the deconstruction work we were carrying out had to be carefully managed."*



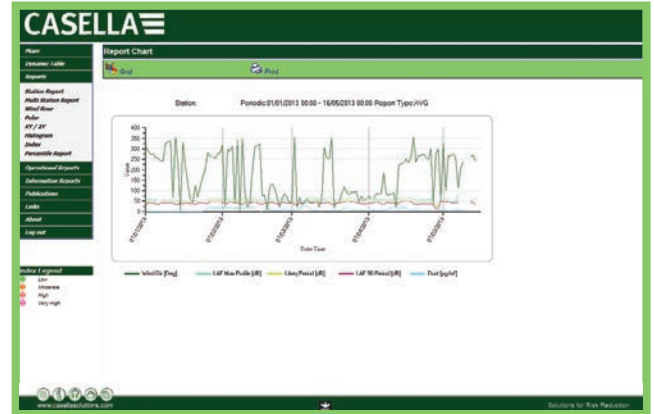
Construction monitoring





Demolition monitoring

*"What's more", Altin concludes: "The Local Authority Environmental Health Officer welcomed the use of the BOUNDARY Guardian because the versatility of the monitor helped us to achieve full environmental compliance."*



Access and analyse your data via our dedicated website [www.dataview247.com](http://www.dataview247.com)



Waste management

Date Time	LAF Max Period	LAeq Period	LAF 10 Period	LAF 90 Period	Wind Speed	Dust
	dB	dB	dB	dB	m/s	µg/m³
01/01/2013 00:00	70.46	45.53	48.50	30.58	1.7	0.0
01/01/2013 01:00	82.06	49.88	50.75	35.58	2.1	0.0
01/01/2013 02:00	58.60	45.23	49.00	33.00	2.2	0.0
01/01/2013 03:00	60.38	42.33	46.41	30.33	1.9	0.0
01/01/2013 04:00	63.02	41.72	45.63	29.13	2.0	0.0

Easy to print, export and report data



Roadside monitoring



The screenshot shows an Excel spreadsheet with columns for 'Station', 'Date Time', 'LAF Max Period', 'LAeq Period', 'LAF 10 Period', 'LAF 90 Period', 'Wind Speed', and 'Dust'. The data rows correspond to the table shown in the previous block.

Produce Graphical or text reports

*He continues: "This required real time 24-hour monitoring. We chose the Casella BOUNDARY Guardian because it has some new features such as local alarms and emails that inform us when dust or noise limits are exceeded, plus a dedicated website for viewing real time and historical data from the unit."*

## Specification:

### Noise:

Accuracy: Class 1 to IEC61672-1  
 Parameters: LAeq, LAmax, LA10%, LA90%  
 Measurement range: 20-140dB RMS  
 Calibration: Via provided acoustic CEL-120/1 calibrator (supplied)

### Particulate:

Sensitivity: 1ug/m<sup>3</sup>  
 Zero stability: +/-2ug/m<sup>3</sup>  
 Size Fractions: Selectable TSP, PM10 or PM2.5  
 Inlet: Heated to reduce moisture affecting measurements  
 Calibration: Insert provided for onsite calibration.

### Wind Speed and Direction Sensor:

**Wind Speed:** 0-60m/s  
 Accuracy: +/-2%  
 Resolution: 0.01m/s  
 Threshold: 0.01m/s  
**Wind Direction:** 0-359° (No Deadband)  
 Accuracy: +/-3%  
 Resolution: 0.1 degrees

### General:

Enclosure Protection: IP65  
 Operating Humidity: <5% to 100%  
 Logger: Inbuilt logger data transmission via GPRS  
 Power: 220-240VAC or 110V  
 Mounting: Wall or pole mounted (50mm pole).  
 600mm x 400mm x 230mm  
 Weight: Approx. 23kg

## Ordering Information:

208110D BOUNDARY GUARDIAN (TOTAL DUST)  
 208111D BOUNDARY GUARDIAN (PM10 OR PM2.5)  
 208120D NOISE GUARDIAN  
 208130D DUST GUARDIAN (TOTAL DUST)  
 208131D DUST GUARDIAN (PM10 OR PM2.5)  
 208140D NOISE GUARDIAN & WSD  
 208150D DUST GUARDIAN (TOTAL DUST) WSD  
 208151D DUST GUARDIAN (PM10 OR PM2.5) WSD  
 208160D BOUNDARY GUARDIAN (TOTAL DUST) WSD  
 208161D BOUNDARY GUARDIAN (PM10 OR PM2.5) WSD

## Option:

208004A Guardian 110V Upgrade

## Communications:

DATA: Access to dataview247.com is provided via secure login (GPRS requires a fixed IP SIM Card) Each Guardian system requires a minimum of one 'data' communications order, see below.

DATA COMMS1	Guardian O2 UK Data
DATA COMMS2	Guardian O2 UK SMS
DATA COMMS3	Guardian Vodafone Global Data
DATA COMMS7	Guardian Vodafone UK Data
DATA COMMS8	Guardian Vodafone UK SMS

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