CASELLA≡

Guardian2

Guardian2
Multi-Agent
Monitoring Station

Guardian2 is designed to help
you remain compliant with site
emission levels, using remote
monitoring and reporting of
noise, dust and vibration.

www.casellasolutions.com

Guardian2

Key Features

- Real-time particulate, noise and ground vibration (PPV)
- Simultaneous PM10, PM2.5 and PM1.0 monitoring
- Web-hosted data with secure, password protected login
- Optional, maintenance free windspeed & direction sensor
- Email and text alerts to nominated recipients
- Manual or automatic reports
- IEC 61672-1 compliant sound level meter
- Wall or pole mounted
- Operates over a wide operating voltage 100-250 VAC

Guardian2 is a web-based remote monitoring system for noise, particulates and ground vibration, either as single 'agents' or in multiple combinations. It is ideal for construction & demolition sites plus many more fence-line applications. Where compliance with limits is required and good relationships with neighbouring people and businesses are a must, Guardian2 can guarantee the smooth progress of your project or manufacturing operations.

mHUB

With the new mHub, data can be streamed straight to your mobile device...

The Guardian2 advanced mHub datalogger and web connectivity allows data to be continuously sent to the cloud. Alerts and status reports can be seamlessly delivered to your mobile device.

Data Anywhere with
www.casella247.com

The mHUB datalogger incorporates an electronic SIM which means that the system will search for the strongest cellular signal but in the event of a lack of connectivity, the mHUB will continue to log then push the stored data to the server when communication is re-established. The Casella 24/7 Data Management System is accessible via a secure log-in, giving organisational administrators and nominated users access rights to data, reports and alerts.

Plug In and Play

Integrated into a small, unobtrusive environmentally sealed housing, Guardian2 can be configured at the time of ordering for a variety of 'agents' depending upon the specific application or requirements. Installation couldn't be simpler; just bolt to a wall or mount on a pole, apply power and then within a few moments begin transmitting data using cellular connectivity to a secure server.

Configure Reports

- For single or multiple agents at once e.g. noise and dust
- Automatic reports can be set to report daily, weekly or monthly data, direct to your inbox
- Graphical or tabular reports

Alert Configuration

- Configure alerts by text or email
- Can be configured for any measured parameter
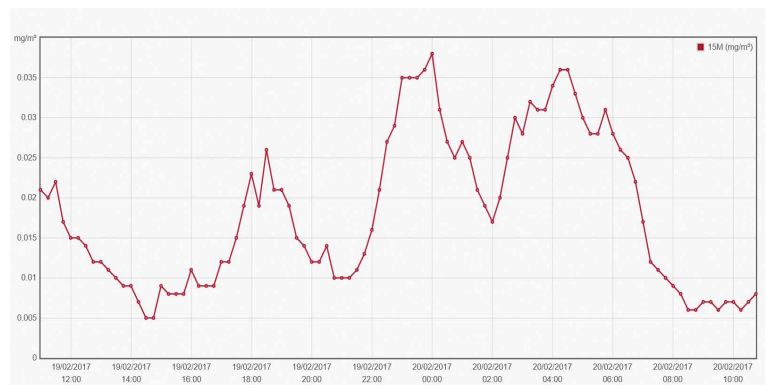- Error alerts, e.g. for power loss

User Configuration

- Different levels of access can be configured to casella247.com
- Specify who just receives reports, or administrator access to configure reports and Guardian2 units
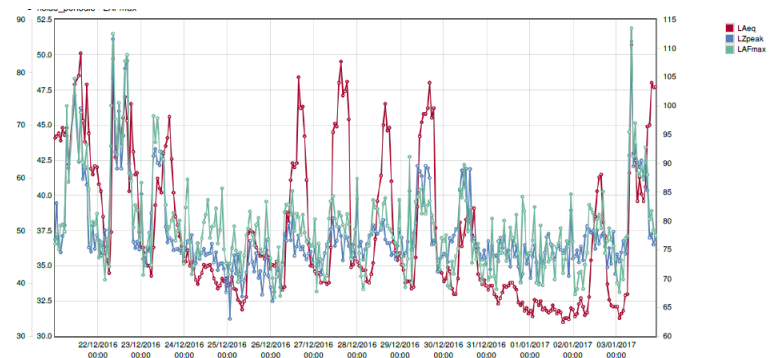- Configure Guardian2 units on different sites remotely

Reporting and alerts

Administrators can choose the number of Users who have access to data and receive alerts while Users themselves can create and edit reports and because there can be multiple sites and Guardians they can easily switch between them. Reports can be created manually or automatically and can be sent by email to multiple recipients if required. Alerts can be generated when specified limits are exceeded as well as notification of power and communications outages should data not be received when expected by the system. Action can then be taken to investigate the causes of these exceedances to head off potential complaints or citations as well as checking for integrity of the Guardian2 itself.

Report showing 15 minute average PM10 levels

Report showing noise data over two weeks

Specification

Noise:
Accuracy:	Class 1 to IEC61672-1
Parameters:	L_{Aeq}, L_{Amax}, $L_{A10\%}$, $L_{A90\%}$
Measurement range:	20-140dB RMS
Calibration:	Via provided acoustic CEL-120/1

Particulate:
Sensitivity:	1ug/m³
Zero stability:	+/-2ug/m³
Size fractions:	Simultaneous PM10, PM2.5 & PM1.0
Inlet:	Heated to reduce moisture affecting measurements

Vibration:
Transducer type:	Geophone
Number of channels:	3-axis
Frequency range:	2-250 Hz
Measurement Range:	+/- 200 mm/s
Resolution:	0.01 mm/s
Environmental rating:	IP65

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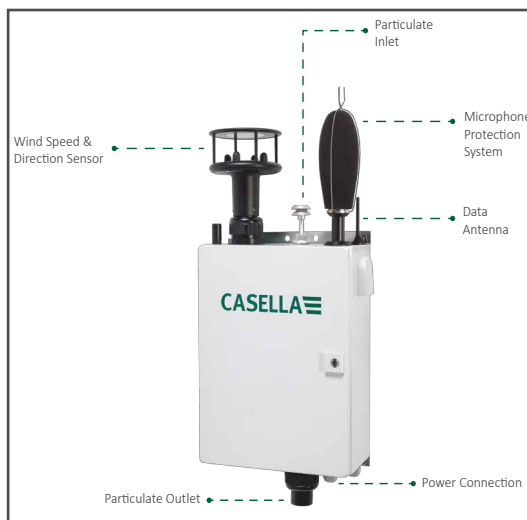|	
Wind Speed:	0-60m/s
Accuracy:	+/-2%
Resolution:	0.01m/s
Threshold:	0.01m/s
Wind Direction:	0-359° (No Deadband)
Accuracy:	+/-3%
Resolution:	0.1 degrees

General:
Enclosure Protection:	IP65
Operating Humidity:	<5% to 100%
Logger:	Inbuilt logger data transmission via GPRS
Power:	100-250VAC
Mounting:	Wall or pole mounted (50mm pole).
Dimensions:	400mm x 300mm x 150mm
Weight:	<13kg

Ordering Information

Guardian2 - Part Numbers

Part Number	Particulate (PM10 & PM2.5)	Noise	Vibration	Windspeed & Direction
208049D			●	●
208052D		●	●	
208054D		●		●
208057D		●		
208061D			●	
208063D		●	●	●
208170D	●	●	●	●
208171D	●	●		●
208172D	●		●	●
208173D	●			●
208174D	●	●	●	
208175D	●	●		
208176D	●			
208177D	●		●	

Accessories	Part Number
Replacement windshield enclosure system:	208041C
Windshield enclosure System extension kit (includes 5m windshield extension cable, mounting bracket & U-bolt and tripod/pole mounting bracket):	208104D
Spare 5m windshield extension cable:	208083C
Replacement foam:	208022C