



**SENSEMYSTREET**  
**User Manual**

v2.0



**SENSEMYSTREET**  
DATA FOR EVERYONE

SenseMyStreet is a toolkit developed in collaboration between Open Lab and Urban Observatory at Newcastle University. Toolkit enables citizens and local communities commission sensors from Urban Observatory and locate them on their local streets to collect evidence for informing or even changing the community. For the first time, the public has access to precision equipment to gather data relevant to their local issues.

**1**

### Tell us your issue

Flag your issue on the map



**2**

### Plan and propose

Decide when and where to place sensors with your local community



**3**

### Get the facts

Get sensors deployed on your street



**4**

### Data for everyone

Get the data to evidence or inform your issue





### Fidas® Frog measuring unit

- 5 Micro USB cable
- 6 Status-LED
- 7 Digital input/output
- 8 Analog input/output
- 9 Power supply connection
- 10 ON/OFF switch
- 11 Measuring input/aerosol guide tube
- 12 Transport insert/aerosol guide tube
- 13 Mini USB port
- 14 Temperature and moisture sensor (extendable)



### Fidas® Frog operating panel (detachable)

- 1 Windows button
- 2 Micro USB port (charger)
- 3 ON/OFF switch
- 4 Volume control

## Charge the batteries

- Plug the power supply of the Fidas® Frog measuring unit into the power supply connection (9).
- Plug the Micro USB cable (5) into the Micro USB port (2) on the Fidas® Frog operating panel.
- Plug the power supply into the mains outlet.
  - ✓ The battery in the Fidas® Frog measuring unit is recharged.
  - ✓ The battery in the Fidas® Frog operating panel is recharged.

## What's Included?

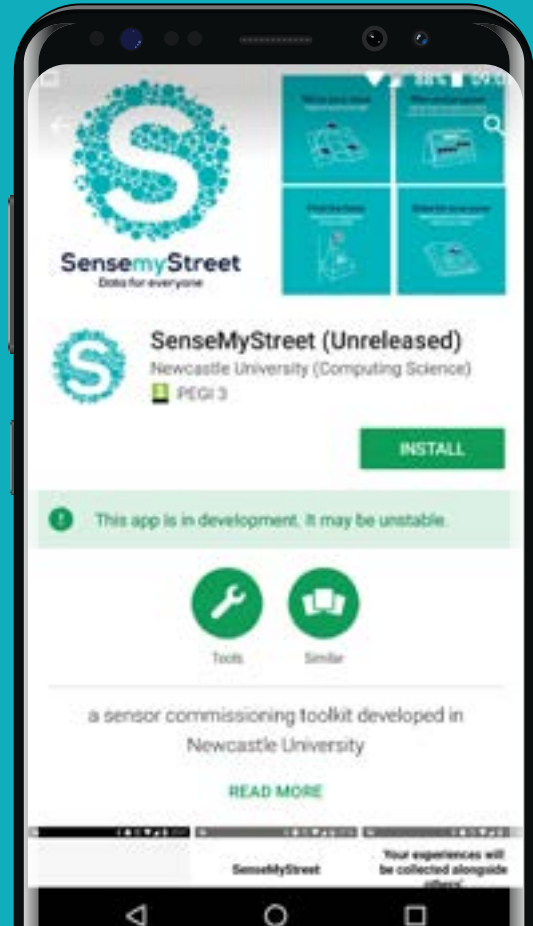
- Fidas® Frog measuring unit, Fidas® Frog operating tablet, aerosol guide tube
- Power supply for the Fidas® Frog measuring unit
- Charger for the operating panel
- Transport bag
- SenseMyStreet High-Vis
- User Manual



# Download the app

\*if your device has a Bluetooth button

1. Go to [sensemystreet.uk/app](http://sensemystreet.uk/app) and sign up to be a beta tester.
2. After that you can download the application of "Google Play Store" by using the your Android phone. Just search for "sensemystreet".
3. After the installation, the app will guide you how to register and use the application with the Bluetooth button attached to the measuring unit.



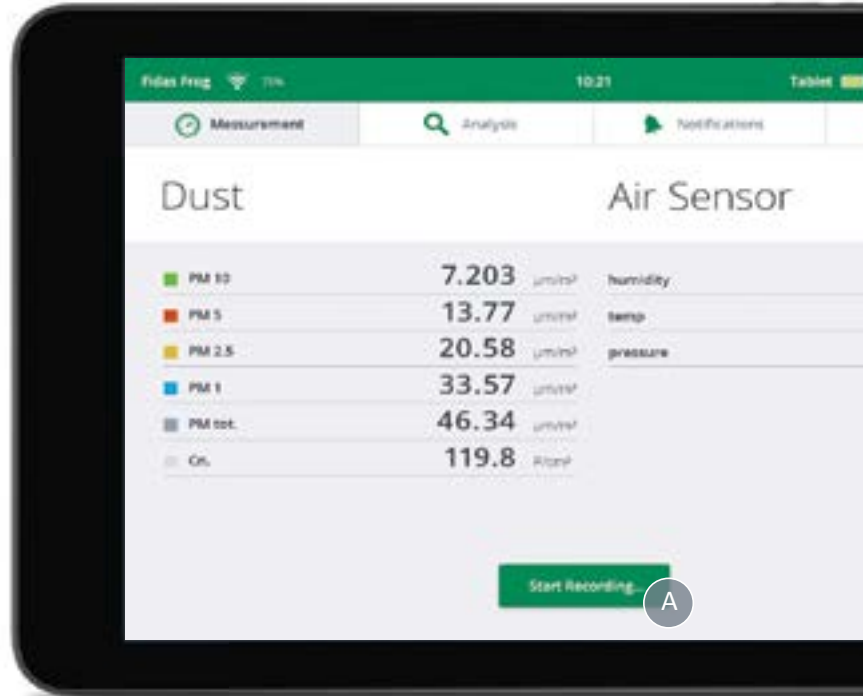
## Preparing to use the monitor

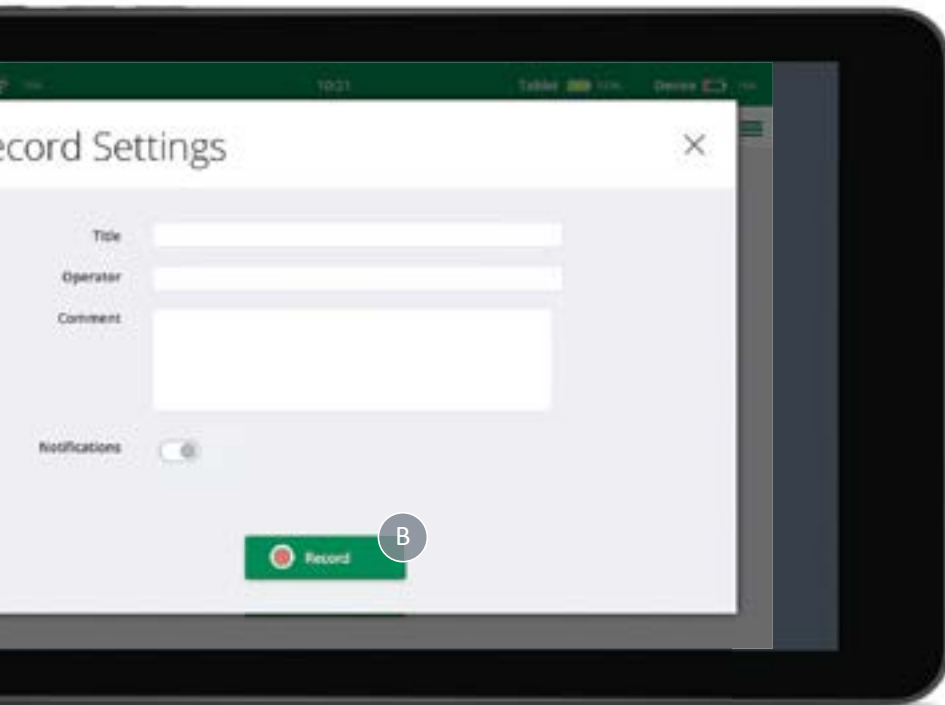
- Insert the aerosol guide tube into the measurement input (11).
- Switch on the Fidas® Frog measuring unit at the ON/OFF switch (10).
- Switch on the Fidas® Frog operating panel at the ON/OFF switch (3).
  - ✓ The Fidas® Frog operating panel boots up.
  - ✓ After the booting process the starting screen is displayed and the fine dust measurement starts automatically (measurement data is not recorded).

## Starting screen

Press [Start Recording] (A) to start recording.

- ✓ A query window appears in which you can enter details about the measurement.





## Query window

Enter [Title] - date 📅 and time 🕒 on the "Keyboard Input".

Leave the [Operator] as default.

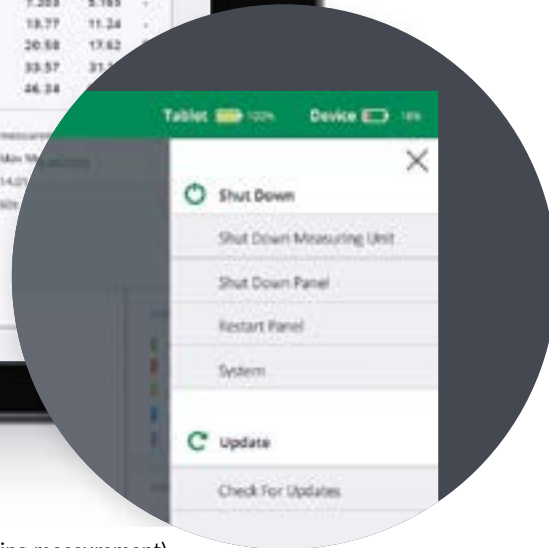
Press [Record] (B) to start the recording.

- ✓ The query window will close and the measurement is displayed.

## Recording screen

The option [Stop Recording] (C) is used to stop the recording.

✓ Select [Menu] (D) to display the options for switching off the system.



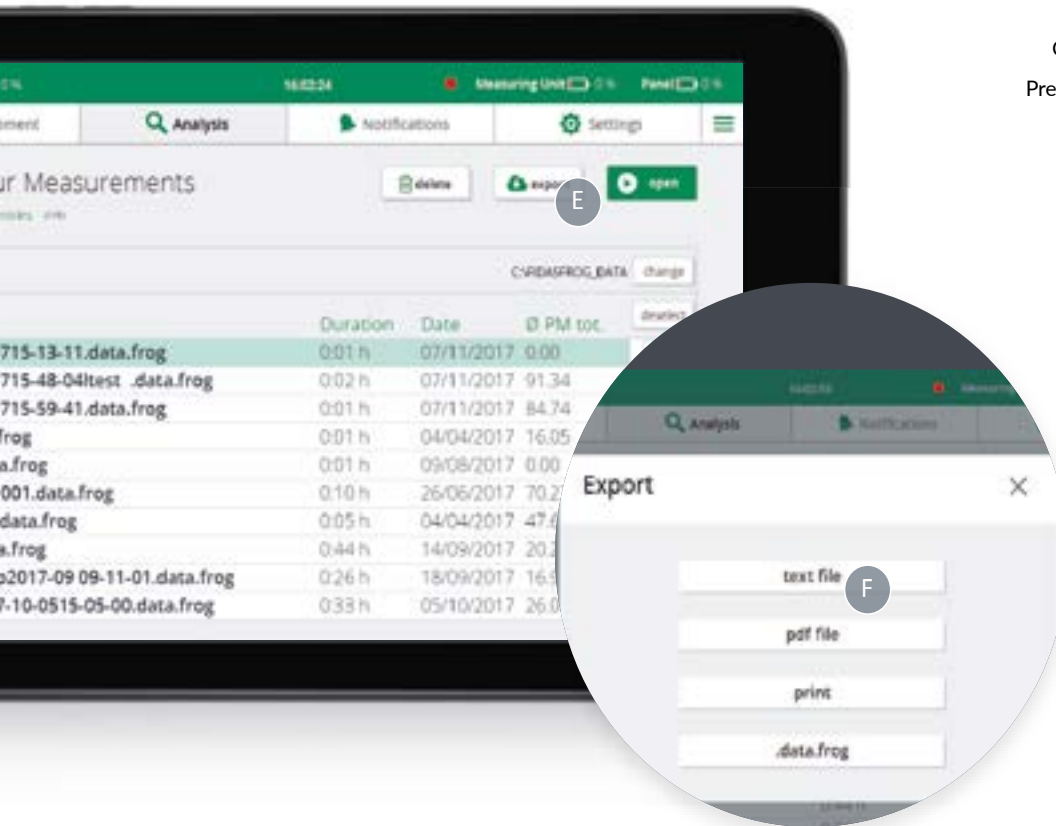
### Options

- Save comments and images for measurements.
- Compare up to 5 measurements (including the ongoing measurement).
- Save limit values.
- Export measurement data.

## Export screen

Choose the file you would like to export.  
Press [Export] (E) to start exporting the file.  
Press [text file] (F) from export pop-up.

- ✓ An export window appears in which you can specify the export details.



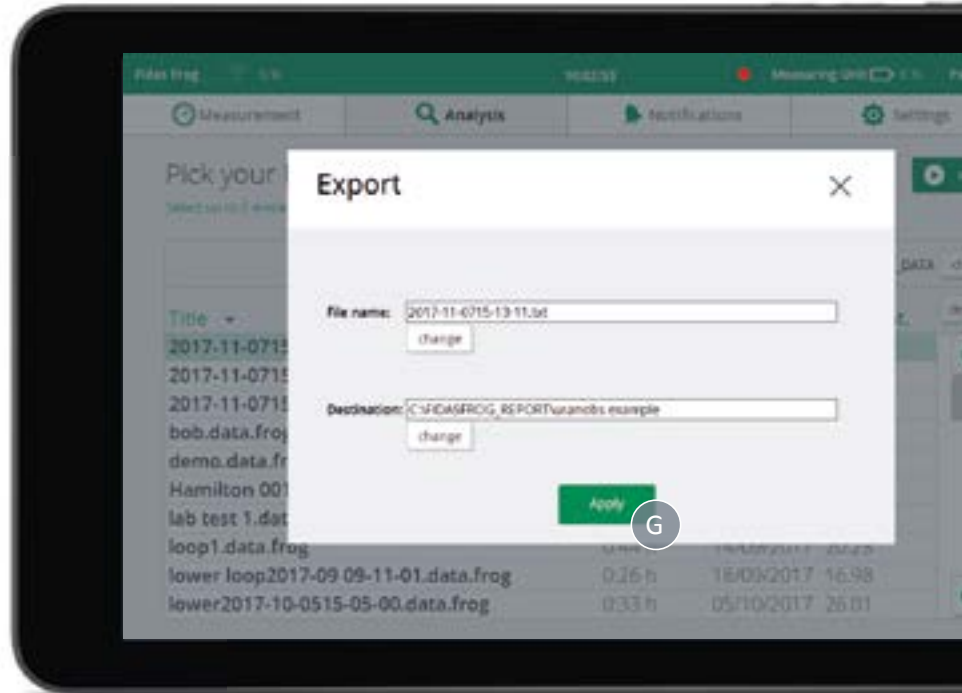


## Export window

You can leave everything as default.

Press [Apply] (G) to export the reading.

- ✓ Your recording will be exported to folder and synced to cloud storage.



# UK and EU Air Quality Limits

National air quality objectives and European Directive limit and target values for the protection of human health						
Pollutant	Applies	Objective	Concentration measured as <sup>10</sup>	Date to be achieved by (and maintained thereafter)	European Obligations	Date to be achieved (by and maintained thereafter)
Particles (PM <sub>10</sub> )	UK	50 µg/m <sup>3</sup> not to be exceeded more than 35 times a year	24 hour mean	31 December 2004	50 µg/m <sup>3</sup> not to be exceeded more than 35 times a year	1 January 2005
	UK	40 µg/m <sup>3</sup>	annual mean	31 December 2004	40 µg/m <sup>3</sup>	1 January 2005
	Indicative 2010 objectives for PM <sub>10</sub> (from the 2000 strategy and Addendum) have been replaced by an exposure reduction approach for PM <sub>2.5</sub> (except in Scotland – see below)					
	Scotland	50 µg/m <sup>3</sup> not to be exceeded more than 7 times a year	24 hour mean	31 December 2010	50 µg/m <sup>3</sup> not to be exceeded more than 35 times a year	1 January 2005
	Scotland	18 µg/m <sup>3</sup>	annual mean	31 December 2010	40 µg/m <sup>3</sup>	1 January 2005
Particles (PM <sub>2.5</sub> ) Exposure Reduction	UK (except Scotland)	25 µg/m <sup>3</sup>	annual mean	2020	Target value - 25 µg/m <sup>3</sup>	2010
	Scotland	10 µg/m <sup>3</sup>		31 December 2020	Limit value - 25 µg/m <sup>3</sup>	1 January 2015
	UK urban areas	Target of 15% reduction in concentrations at urban background		Between 2010 and 2020	Target of 20% reduction in concentrations at urban background.	Between 2010 and 2020

Air Quality Limits. Source: Department for Environment Food & Rural Affairs  
[uk-air.defra.gov.uk/air-pollution/uk-eu-limits](http://uk-air.defra.gov.uk/air-pollution/uk-eu-limits)

# Working on behalf of people

Aare Puusaar - Open Lab  
a.puusaar2@newcastle.ac.uk

Philip James - Urban Observatory  
urbanobservatory@newcastle.ac.uk

This project is developed in collaboration between [Open Lab](#) and the [Urban Observatory](#) at Newcastle University; it is funded by Engineering and Physical Sciences Research Council (EPSRC)

Open Lab  Newcastle University

 urban observatory

**EPSRC**

Engineering and Physical Sciences  
Research Council



SenseMyStreet is a project of Open Lab at Newcastle University  
Fidas® Frog is a product of Palas GmbH and it reserves all proprietary and  
intellectual property rights for the technical drawings