



L'Observatoire de l'air en Île-de-France

**Lycéens, collégiens,
prenons notre air en main !
- Atelier : Moyens de mesure -**

1. Intro
2. AirVisual Node
3. AirBeam

1 Intro





AirVisual Node

- Plateforme **statique** de mesure de la qualité de **l'air intérieur**
- Mesures: CO₂, PM_{2.5}, température et humidité
- Prix: €269



AirBeam

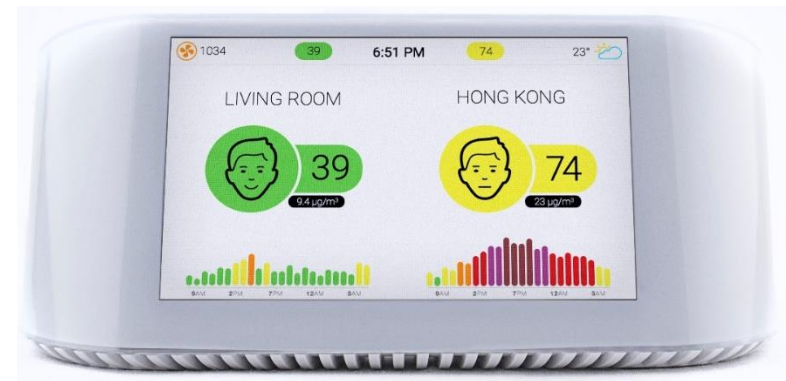
- Plateforme **portable** de mesure de la qualité de **l'air intérieur/extérieur**
- Mesures: PM_{2.5}, température et humidité
- Prix: €215

2 | AirVisual Node



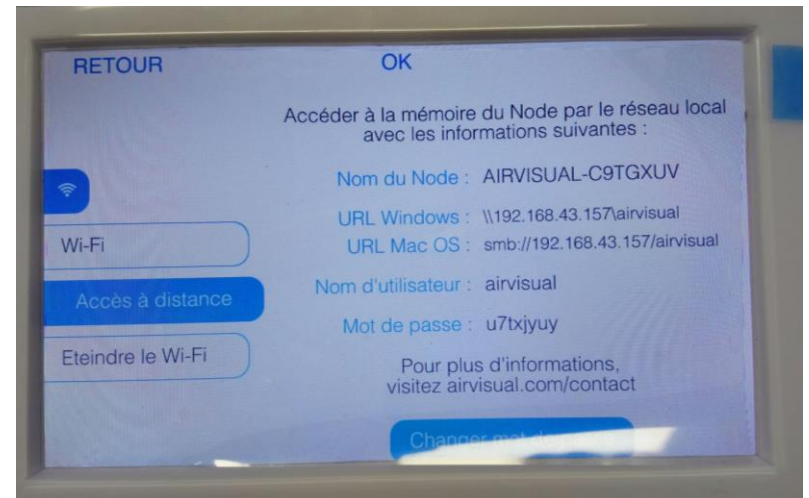
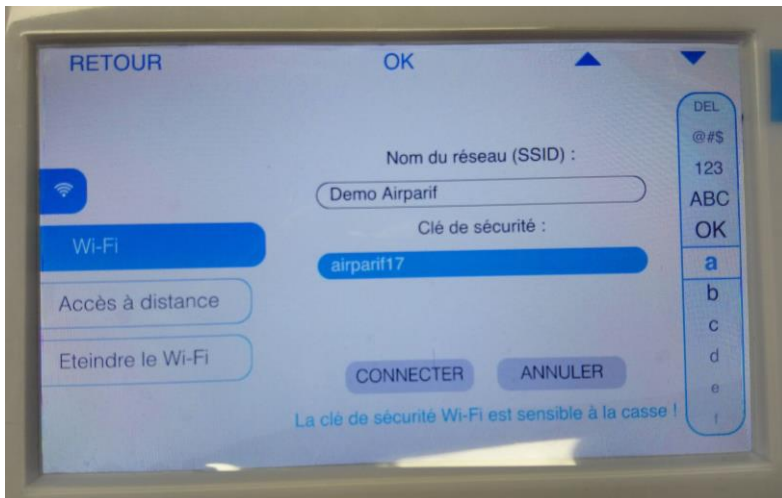
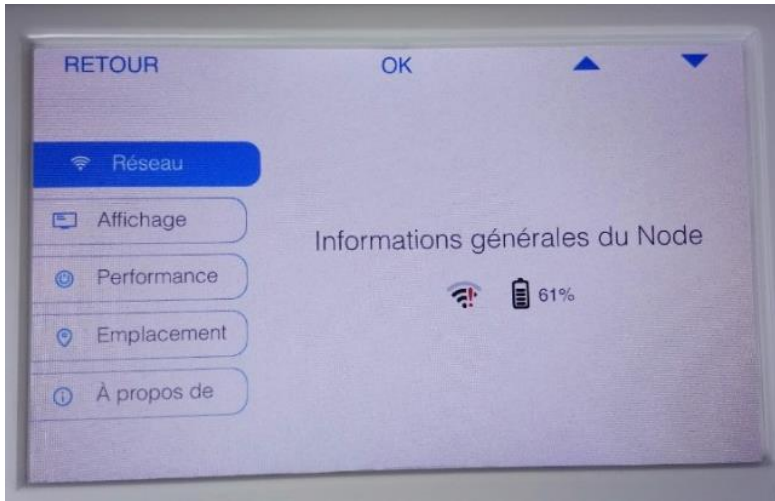
Spécifications techniques

- Capteurs:
 - Capteur CO2 détection infrarouge : 400 – 10'000 ppm
 - Compteur PM2.5 détection optique (laser) : 0.3 – 2.5µm
- Dimensions : 17.5 x 7 x 7 cm
- Masse : 410 g
- Interactivité : écran 5 pouces, boutons, application portable
- Communication : Wi-Fi 802.11 b/g/n 2.4 GHz
- Stockage interne : jusqu'à 5 ans
- **Tenir à l'abri de la lumière directe et branché !**

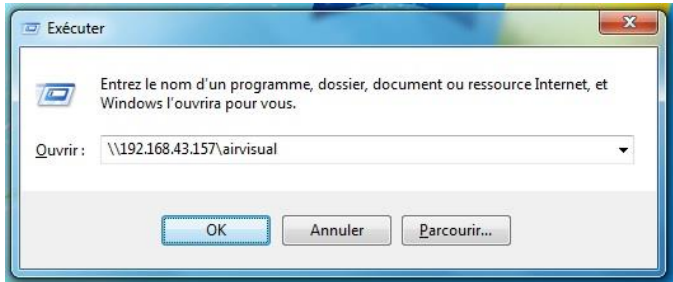




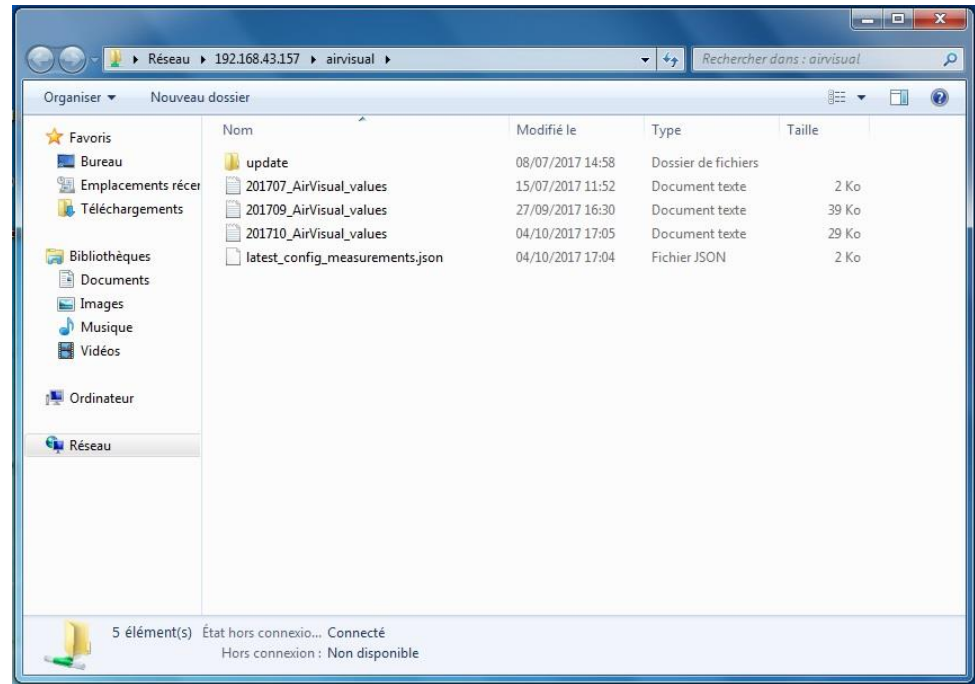
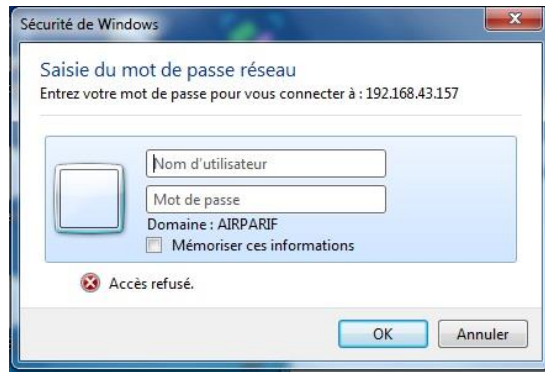
Connexion directe WiFi



Connexion directe WiFi



Sur un ordinateur connecté sur le même réseau :



Connexion directe WiFi

```
1 Date;Time;Timestamp;PM2_5 (ug/m3);AQI (US);AQI (CN);PM10 (ug/m3);Outdoor AQI (US);Outdoor AQI (CN);Temperature (C);Temperature (F);Humidity (%RH);CO2 (ppm)
2 2016/08/10;12:05:37;1470830737;23.0;74;33;24.0;0;0;27.5;81.4;69;0
3 2016/08/10;12:05:47;1470830747;23.0;74;33;23.0;0;0;27.5;81.4;69;2259
4 2016/08/10;12:05:57;1470830757;22.0;72;31;22.0;0;0;27.5;81.4;69;2197
5 2016/08/26;04:09:23;1472184563;103.4;176;136;14365.0;0;0;26.7;80.0;71;0
6 2016/08/26;04:09:33;1472184573;9.1;38;13;11.0;0;0;26.7;80.0;71;649
7 2016/08/26;04:09:43;1472184583;7.5;31;11;10.0;0;0;26.7;80.0;71;611
8 2016/08/26;04:09:53;1472184593;7.5;31;11;10.0;0;0;26.7;80.0;71;564
9 2016/08/26;04:10:03;1472184603;9.1;38;13;11.0;0;0;26.7;80.0;71;547
10 2016/08/26;04:10:13;1472184613;10.8;45;15;12.0;0;0;26.7;80.0;71;537
11 2016/08/26;04:10:23;1472184623;10.8;45;15;12.0;0;0;26.7;80.0;71;534
12 2016/08/26;04:10:33;1472184633;9.1;38;13;11.0;0;0;26.7;80.0;71;529
13 2016/08/26;04:10:43;1472184643;10.8;45;15;12.0;0;0;26.7;80.0;71;523
14 2016/08/26;04:10:53;1472184653;10.8;45;15;12.0;0;0;26.7;80.0;71;516
15 2016/08/26;04:11:03;1472184663;10.8;45;15;12.0;0;0;26.7;80.0;71;511
16 2016/08/26;04:11:13;1472184673;10.8;45;15;12.0;0;0;26.7;80.0;71;505
17 2016/08/26;04:11:23;1472184683;10.8;45;15;12.0;0;0;26.7;80.0;71;501
18 2016/08/26;04:11:33;1472184693;10.8;45;15;12.0;0;0;26.7;80.0;71;496
19 2016/08/26;04:11:43;1472184703;10.8;45;15;12.0;0;0;26.7;80.0;71;493
20 2016/08/26;04:11:53;1472184713;9.1;38;13;11.0;0;0;26.7;80.0;71;491
21 2016/08/26;04:12:03;1472184723;9.1;38;13;11.0;0;0;26.7;80.0;71;488
22 2016/08/26;04:12:13;1472184733;9.1;38;13;11.0;0;0;26.7;80.0;71;488
23 2016/08/26;04:12:23;1472184743;9.1;38;13;11.0;0;0;26.7;80.0;71;489
24 2016/08/26;04:12:33;1472184753;9.1;38;13;11.0;0;0;26.7;80.0;71;489
25 2016/08/26;04:12:43;1472184763;7.5;31;11;10.0;0;0;26.7;80.0;71;489
```

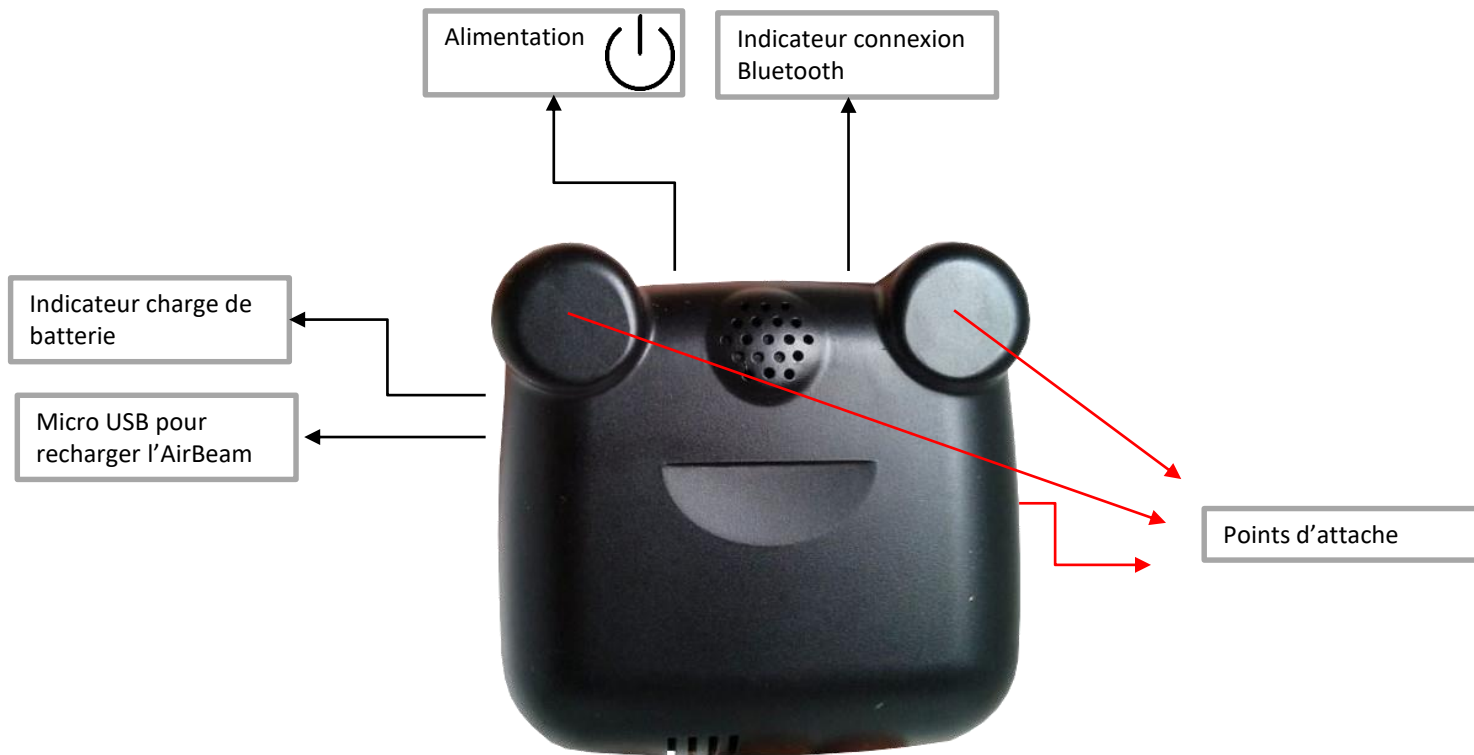
3 | AirBeam



Spécifications techniques

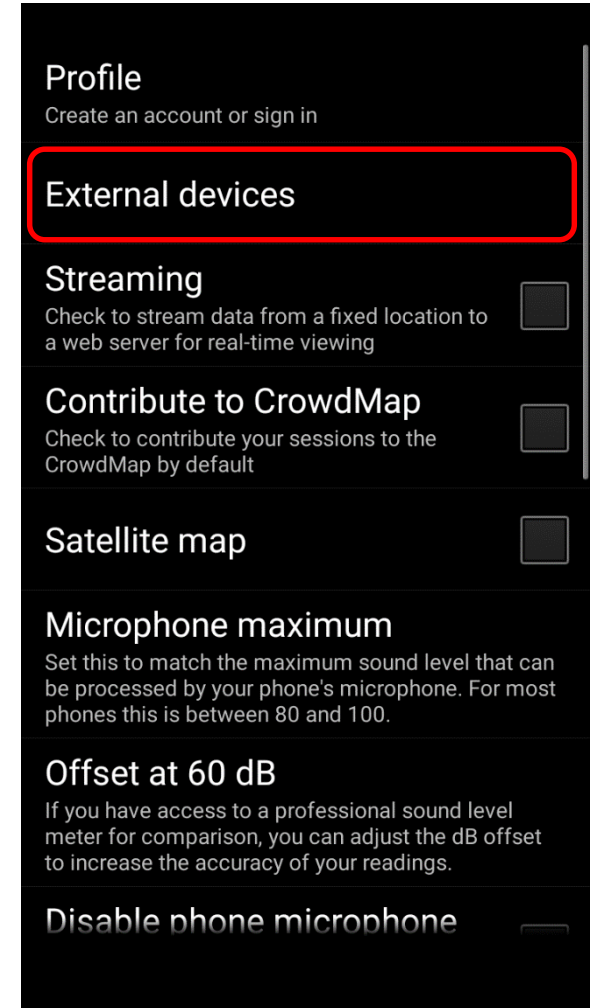
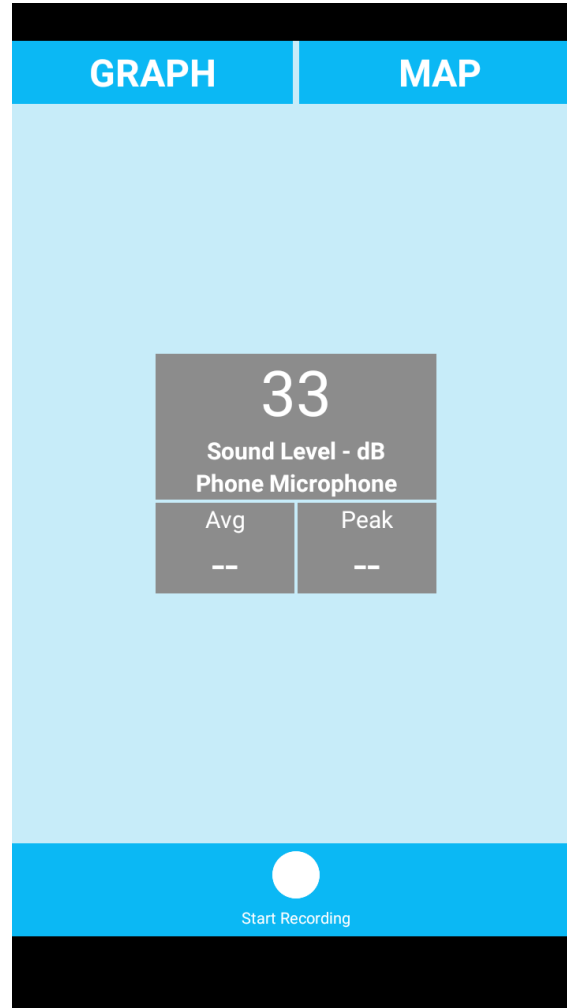
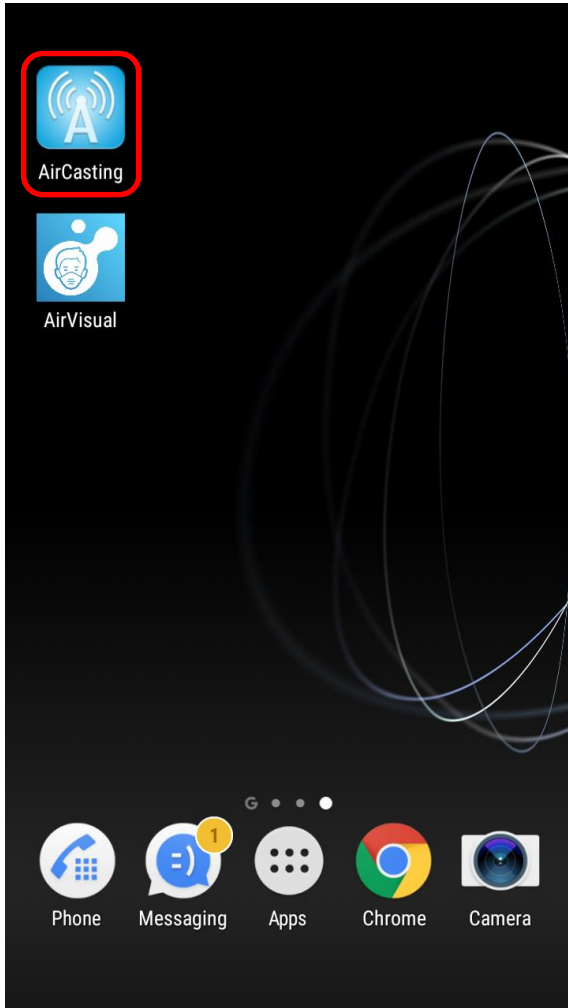
- Compteur PM2.5 détection optique (infrarouge) : 0.5 – 2.5 μ m
- Dimensions : 10 x 10 x 4.5 cm
- Masse : 200 g
- Interactivité : application portable
- Communication : Bluetooth
- **Autonomie : jusqu'à 10 h**
- **Pas de stockage interne**
- **Pas étanche ! Ne pas utiliser sous la pluie ou la neige !**



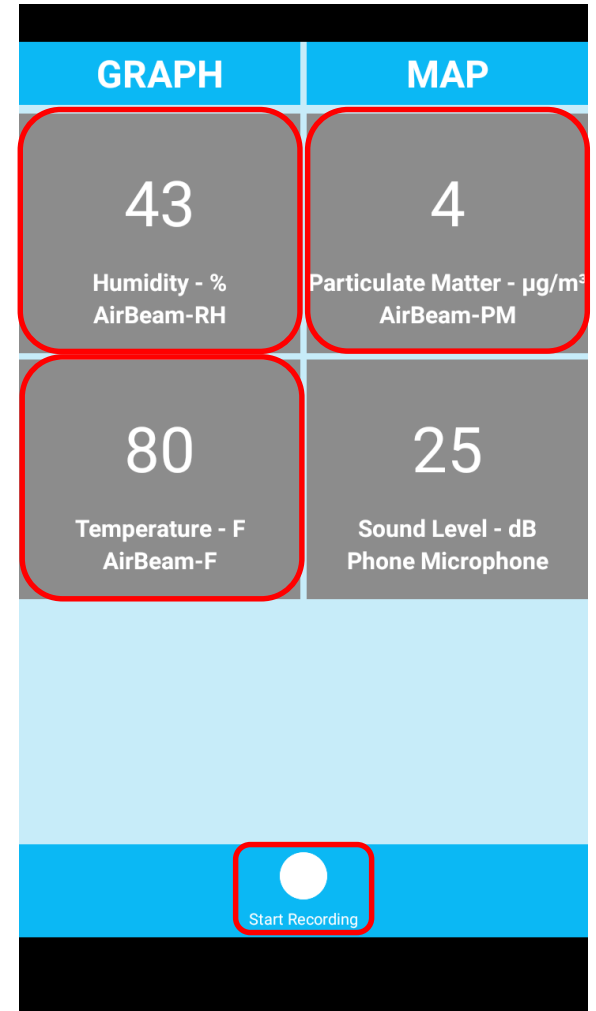
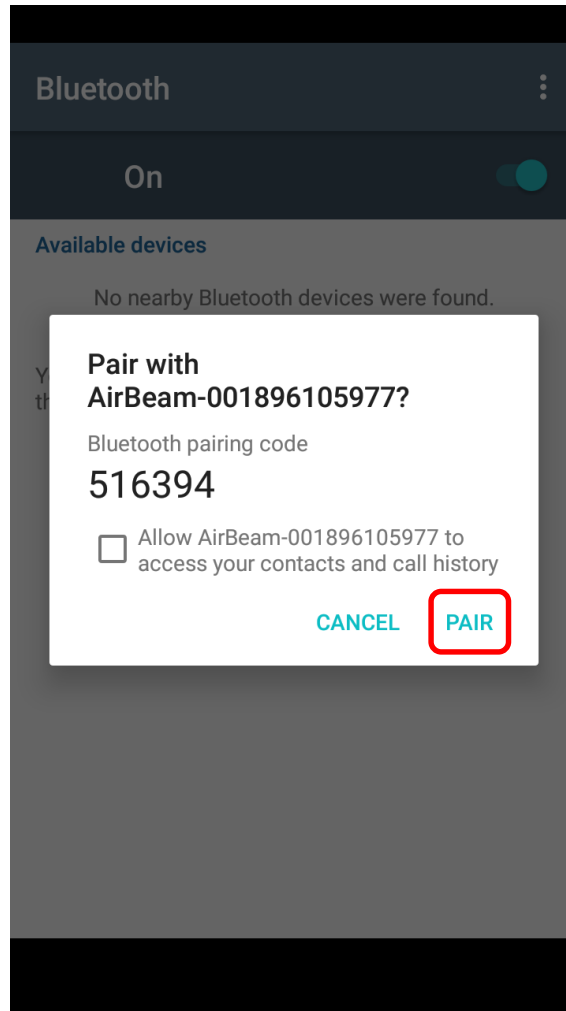
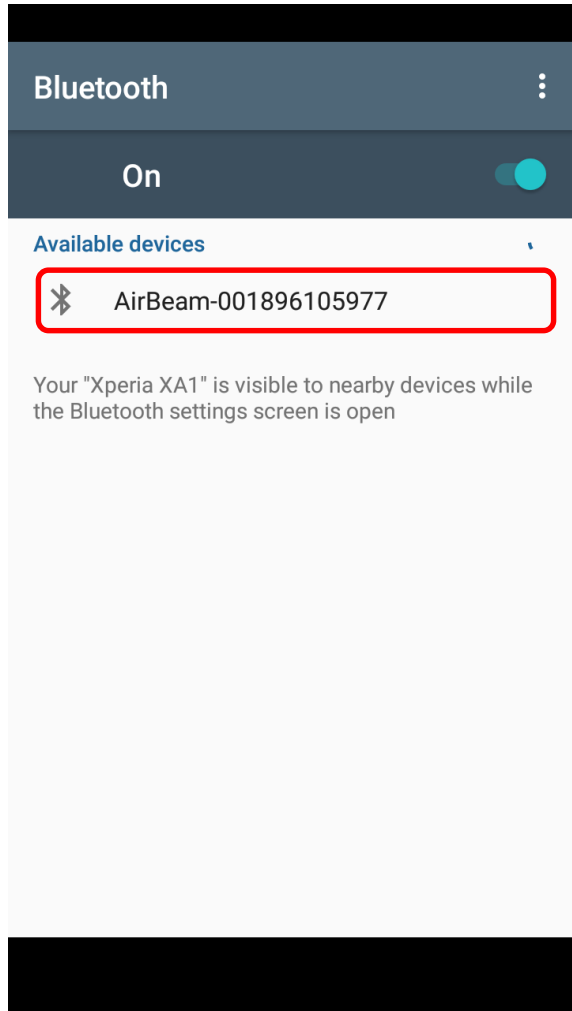


L'AirBeam doit être porté toujours vertical !!

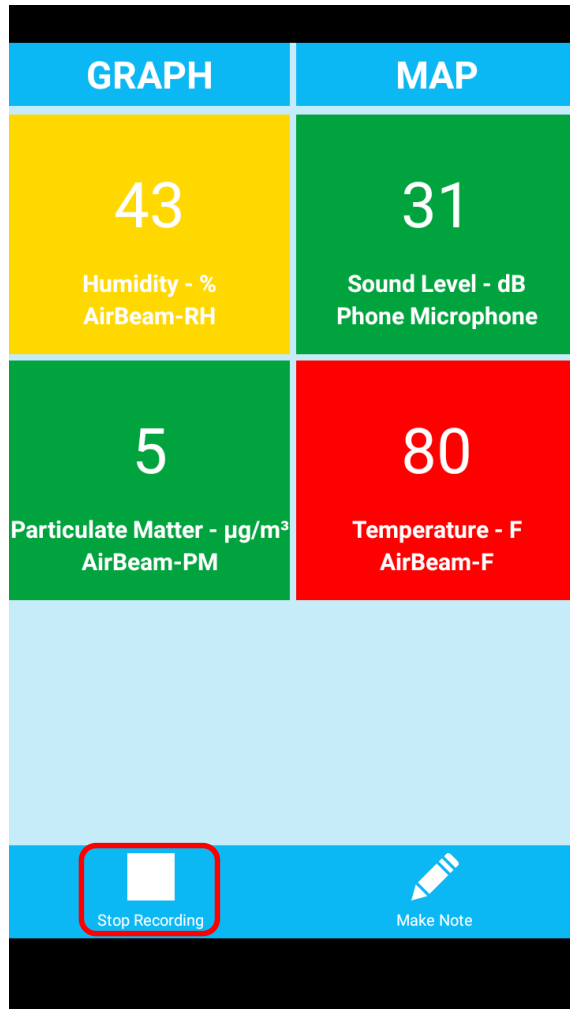
Connexion portable



Connexion portable



Connexion portable



GRAPH MAP

Session details

Title:

Tags:

Description:

Save session

Discard session

Start Recording

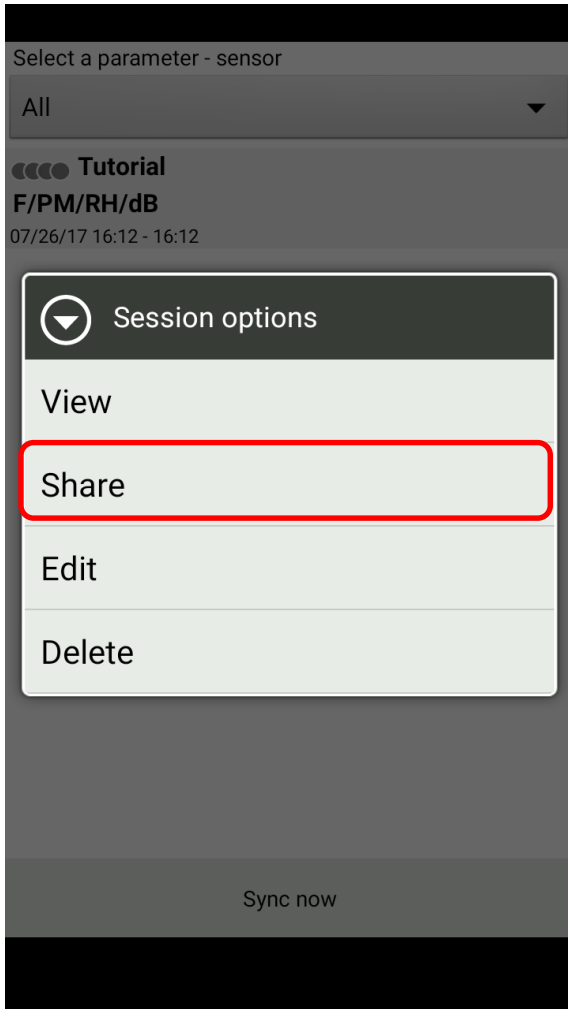
Select a parameter - sensor

All

Tutorial
F/PM/RH/dB
07/26/17 16:12 - 16:12

Sync now

Connexion portable



```
1 sensor:model,sensor:package,sensor:capability,sensor:units
2 AirBeam-RH,AirBeam:001896105977,Humidity,percent
3 Timestamp,geo:lat,geo:long,Value
4 2017-07-19T15:48:37.794+0200,2.3649242,48.8489933,35.0
5 2017-07-19T15:48:38.757+0200,2.3649242,48.8489933,35.0
6 2017-07-19T15:48:39.764+0200,2.3649242,48.8489933,35.0
7 2017-07-19T15:48:40.746+0200,2.3649242,48.8489933,35.0
8 2017-07-19T15:48:41.838+0200,2.3649242,48.8489933,35.0
9 2017-07-19T15:48:42.774+0200,2.3649242,48.8489933,35.0
10 2017-07-19T15:48:43.767+0200,2.3649242,48.8489933,35.0
11 2017-07-19T15:48:44.792+0200,2.3649242,48.8489933,35.0
12 2017-07-19T15:48:45.799+0200,2.3649242,48.8489933,35.0
13 2017-07-19T15:48:46.792+0200,2.3649242,48.8489933,35.0
14 2017-07-19T15:48:47.754+0200,2.3649242,48.8489933,35.0
15 2017-07-19T15:48:48.822+0200,2.3649242,48.8489933,35.0
16 2017-07-19T15:48:49.760+0200,2.3649242,48.8489933,35.0
17 2017-07-19T15:48:50.815+0200,2.3649242,48.8489933,35.0
18 2017-07-19T15:48:51.811+0200,2.3649242,48.8489933,35.0
19 2017-07-19T15:48:52.812+0200,2.3649242,48.8489933,35.0
20 2017-07-19T15:48:53.786+0200,2.3649242,48.8489933,35.0
21 2017-07-19T15:48:54.800+0200,2.3649242,48.8489933,35.0
22 2017-07-19T15:48:55.800+0200,2.3649242,48.8489933,35.0
23 2017-07-19T15:48:56.814+0200,2.3649242,48.8489933,35.0
24 2017-07-19T15:48:57.802+0200,2.3649242,48.8489933,35.0
25 2017-07-19T15:48:58.912+0200,2.3649242,48.8489933,35.0
26 2017-07-19T15:48:59.791+0200,2.3649242,48.8489933,35.0
27 2017-07-19T15:49:00.840+0200,2.3649242,48.8489933,35.0
28 2017-07-19T15:49:01.800+0200,2.3649242,48.8489933,35.0
29 2017-07-19T15:49:02.826+0200,2.3649242,48.8489933,35.0
30 2017-07-19T15:49:03.847+0200,2.3649242,48.8489933,35.0
```




L'Observatoire au service de la Santé
et de l'Action

airparif.fr



Contact : adrian.arfire@airparif.fr | 01 44 59 40 38