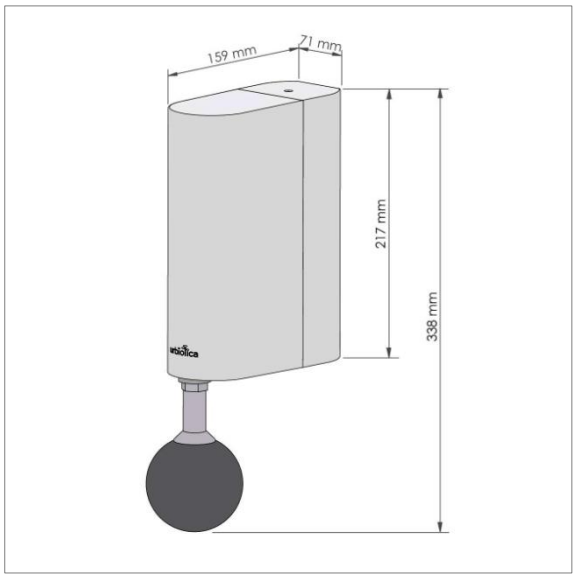
U-Sound Noise sensor Datasheet



U-Sound is an autonomous and wireless **acoustic sensor** designed to measure noise in the city.

It makes continuous measurements and every minute, it sends a new **equivalent continuous sound level** value ($L_{Aeq1'}$, $L_{Ceq1'}$ and $L_{Zeq1'}$) through the communication network. This information is available in the cloud and can be **consulted in real time remotely**.

From the data captured by the sensor, it is possible to generate other indicators (e.g.: L_N, L_{DEN}) and **alerts** for exceeding the previously defined noise levels.

Features

- Lifetime of 12 years with minimal maintenance
- Fast installation on lampposts or facades
- Powered by the lighting system or solar panels
- Rechargeable battery with 3 days of autonomy
- Design integrated with urban environment
- On-site calibration
- Easy integration of the sensor data with 3rd party systems

Technical specifications

CE

Range of detection	40 dB(A) to 110 dB(A)
Range of frecuency	20 Hz to 20KHz
Accuracy	Equivalent to a Class II sound level meter according to norm IEC 61672
Connectivity	IEEE® 802.15.4 - 2.45 GHz
Antenna beam width	180º
Mesh network range	Up 100 m
Power supply, average and maximum power	Universal 100 – 240 V AC, 0.35W, 6W
Daily consumption	8.4 Wh per day
Minimum charge time	4 hours per day
Weight	750 g
Operating temperature range	-33ºC to 65ºC