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# Mobile Air Quality Monitoring Device

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Air pollution represents a continuously increasing environmental issue which poses significant health and ecological related risks globally. It results from a complex mixture of pollutants, including, but not limited to: particulate matter (PM), carbon dioxide (CO2), sulfur dioxide (SO2) or volatile organic compounds (VOCs) that originate from industrial activities and vehicular emissions. Exposure to surrounding pollution is almost unavoidable in today's society context, but one solution to limit its impact on one's health would be to avoid the highly polluted areas as much as possible.
We propose a new and low-cost wearable hardware solution that is able to track these harmful air pollutants in real time and send measurements and alerts. Multiple devices can track pollution over a city-wide area and deliver air quality measurements that can be accessed by the public. The developed device is housed in a small-sized, modular enclosure, that offers interchangeable mounting brackets for various use case scenarios: body-worn or bike-mounted. This way, the user is able to employ these devices in daily activities and adjust one's normal route when commuting in the city to minimise the risks related to pollution exposure.

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