



### **Detected Gases**

H2S, S02, C02, C0, Cl, C2H04, H2, HCl, HCN, NH3, O3, NO2, PH3, O2, CH4, NO, VOCs and more



#### **Temperature Range**

-50°C to + 50°C. Gas Analyzer kept in A/C regulated cabin



## **Built-in Data Storage**

On-board 500GB SSD. Data is also transmitted to multiple safe sources to prevent any potential data loss



#### Calibration

Auto-zero function + manual span calibration, using calibration gas and onboard screen



## **Lidar Equipped!**

The reliability, power efficiency, and surround view of the powerful puck lidar sensor make it the ideal solution for the UrbanScanner



#### 360 Degree Camera!

The camera collects 360° images by stitching two 180° high resolution images at 24 frames per second

# **URBANSCANNER US20**

HIGH DENSITY URBAN CENTRE MONITORING SOLUTION

The Urban Scanner™ is a complete platform that provides detailed air quality information within urban landscapes. It achieves this by collecting and combining a variety of information such as air pollution concentrations, a 3D map of the city, traffic conditions, micro-weather patterns, and more.

Data is collected using a weather-proof, easily mountable device installed on the roof of a vehicle. The data is then processed using a sophisticated AI-based algorithm to extract key information and correlate it to an air quality value at any location within the sampling environment. Advanced deep learning is utilized to generate geo-spatial predictions of urban pollution. This means that the system can provide pollution concentration values for locations that the Urban Scanner has not even sampled. The model can also be used to identify polluted zones and pinpoint the source of local pollution.





Graphic emission representation and reports are generated with the click of a button!

Urban Scanner collects data on a dedicated in-vehicle computer and uses a server to store, process, and map all gathered geo-referenced sensor data. The server is a geographical Postgre SQL database with the Post GIS extension, in which all sensor data is stored based on location and is used to map air quality along driving routes. The web based front-end runs in Apache with the PHP extension. All data gathered by the sensor network is geo-referenced, time-tagged, and stored in the server.

A set of user interfaces has been implemented to enable user access to this data. The data is relayed in real-time to the operator, including live sensor readings, vehicle location, air quality maps, and notifications.

## **Unparalleled Urban Sensor Technology!**

The UrbanScanner comes equipped with gas sensor analyser technology, a laser scattered particulate monitor, ultrasonic anemometer, optional LIDAR module, 360 camera, high resolution compass, GPS receiver, noise sensors, and an EMF detector.











