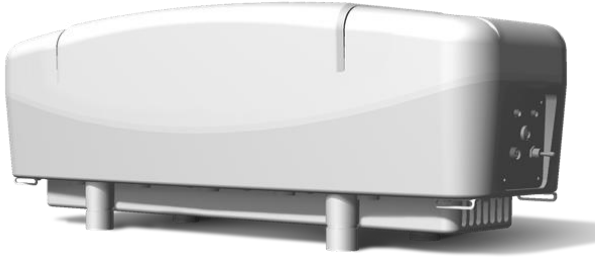


## DV3000 Portable Optical Ambient Air Analyzer



The DV3000 is a real-time, portable analysis unit, capable of measuring a large range of gases, including benzene, using ultraviolet spectroscopy.

Proprietary software and algorithms analyse real-time readings and generate ppb concentration levels, typically every second per species.

Large cities use to operate several Professional ambient air monitoring stations. Duvas instruments installed on vehicles allow on-line monitoring of the pollution in streets during real traffic conditions and create a dynamic map of the city pollution.

The Professional stations are used for reference setting for the modelling software.

Duvas can be also used for fence line monitoring of industrial plants.

The method of sampling uses ultraviolet light within a multi pass sample chamber. The multi pass system allows for the necessary path length for measuring low concentrations in a relatively compact device.



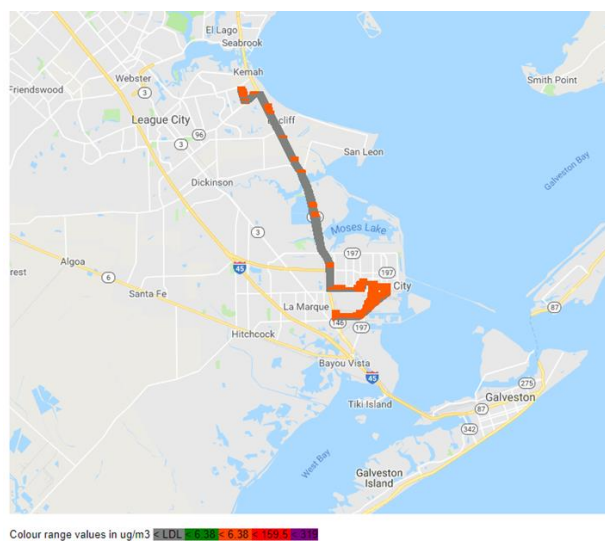
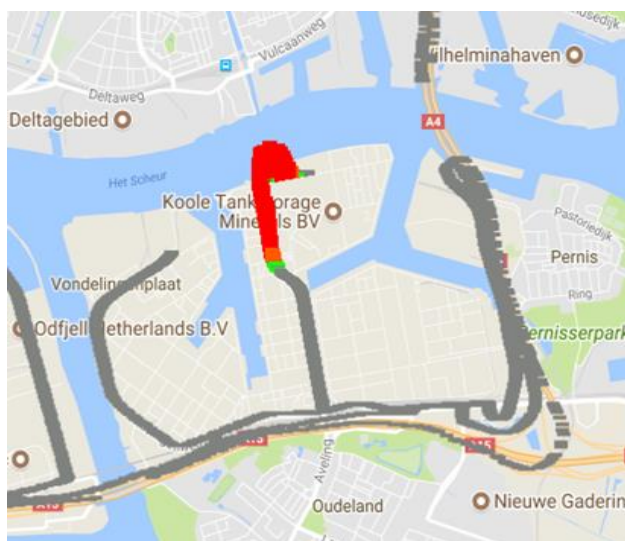
In UV spectroscopy, the sample is irradiated with the broad spectrum of the UV radiation. If a particular electronic transition matches the energy of a certain band of UV, it will be absorbed into the gas species. Each gas species detectable by UV has its own unique absorption spectrum properties, or fingerprint, which makes it possible to identify its presence and its concentration



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The monitored data are processed in real time and presented in GIS, satellite or tabular form.



### DV3000 Specification Sheet

	BEN	TOL	ETB	XYM	XYO	XYP	O <sub>3</sub>	NO	NO <sub>2</sub>	SO <sub>2</sub>	STY	NH <sub>3</sub>	FOR	BUT
Range	Lower Detectable Limit (ppb)	2	5	5	5	5	2	5	2	15	2	2	17.5	5
	Upper Detectable Limit (ppb)	1000	250	500	500	500	250	500	500	1000	500	250	250	1000
Zero Drift (24hrs) (ppb)	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5
Precision*	±0.4%	±1.5%	±1.1%	±0.7%	±1.2%	±0.6%	±0.9%	±0.2%	±1.6%	±0.2%	±0.2%	Tbc	±1.6%	Tbc
Linearity	±1%	±2%	±2%	±2%	±2%	±2%	±2%	±1%	±2.5%	±1.5%	±1.5%	Tbc	±3%	Tbc

Specification	Option	Value
Preset Ranges (Rolling Averages)	Mobile	1 Second
	Portable	4 Seconds
	Stationary	300 Seconds
	Zero/QC Checks	100 Seconds
Response Frequency		1 Second
Detection Resolution		0.1 ppb
Flow Cell Volume		3 Litres
Sample Flow Rate	Low – QC/Zero	2-5 L/min
	High – sampling	120 L/min
Unit Operating Temperature		10 °C – 30 °C
Ambient Air Temperature		0 °C – 40 °C
Lamp Lifetime		Minimum 2000 Hours
Battery Life		Up to 6 hours
Dimensions		840 x 290 x 280 mm
Weight	With Batteries	32 Kg
	Without Batteries	25 Kg

Specification	Option	Value
Power Supply Options		24V DC @ 4A. 96W maximum.
Outputs		RS232 Ethernet Bluetooth
Data Viewing Options	Tablet Mobile Laptop/PC	Duvas App Duvas App Duvas Viewer
Data Storage		128 GB USB
Approvals and Accreditations	CE BOC Calibration Gas	IEC 61010-1 Certified Against ISO Standards

\*Dependent on accuracy of calibration gas used

With detailed information on solutions of your interest we are gladly available on our contact:

**ECM ECO Monitoring, a.s.**  
Nevádzová 5, 821 01 Bratislava,  
Slovak Republic

Phone: +421 2 4342 94717  
E-mail: [ecm@ecm.sk](mailto:ecm@ecm.sk)  
[www.ecmonitoring.com](http://www.ecmonitoring.com)