O_3 Ozone

airpointer®

About Ozone:
Ozone is a highly poisonous corrosive substance and a common pollutant. Ozone is formed in the atmosphere by reaction of nitrogen oxides, hydrocarbons, and sunlight. Some kinds of electrical equipment, e.g. television sets, photocopiers and electric motors (which use brushes), generate levels of ozone that a human can easily smell.

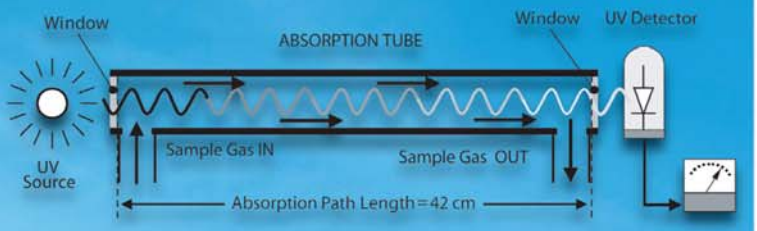
Health and environmental effects:
Acute effects include respiratory symptoms, pulmonary function changes, increased airway responsiveness and airway inflammation.
Ozone damages the leaves of trees and other plants (photooxidation), ruining the appearance of cities, national parks, and recreation areas.

Sources: *WHO Regional Publications, European Series, No. 91, „Air quality guidelines for Europe", 2nd edition, 2000; GESTIS Stoffdatenbank (http://www.hvbg.de/d/bia/fac/stoffdb/index.html); U.S. Environmental Protection Agency (www.epa.gov)*

Ozone and the airpointer®

Measurement Principle:
Ultraviolet Photometryaccording to EU-Directive: EN 14625

O_3 / Ultraviolet Photometry: From a high energy UV lamp a beam goes through a tube, which is filled with the sample gas. The decrease of the light's density, resulting from the presence of ozone, is measured with a detector at the end of the tube.



Component	EU Directive Methodology	Measurement Principle	Range	Units	Lower Detectable Limit	Zero Drift	Span Drift
Ozone (O_3)	Ultraviolet Photometry (EN 14625)	Ultraviolet Photometry	Dynamic range up to 10 ppm	ppb, ppm, µg/m³, mg/m³	< 1.0 ppb	< 1.0 ppb/ 24 hours < 1.0 ppb/ 7 days	< 1.0 % of reading/ 7 days

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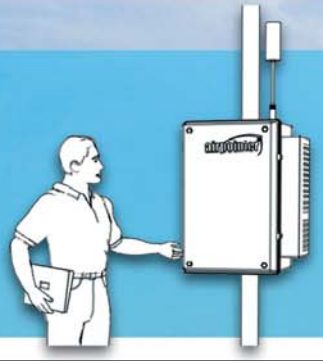
LIVE ON AIR



Patents Pending

si analytics
Tel: 011 444 7808 Fax: 011 444 7806
Email: info@sianalytics.co.za
Web: www.sianalytics.co.za