



SO₂

Sulphur Dioxide

airpointer
Compact Monitoring Station

About Sulphur Dioxide :

Sulphur dioxide is an acid tasting, colourless, pungent smelling and toxic gas.

Major sources are heat and power generation facilities that use poor quality oil or coal containing sulfur.

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)



Health and environmental effects:

The effects observed include reductions in ventilatory capacity, increases in specific airway resistance and symptoms such as wheezing, chest tightness or shortness of breath. It also could lead to headache and nausea.

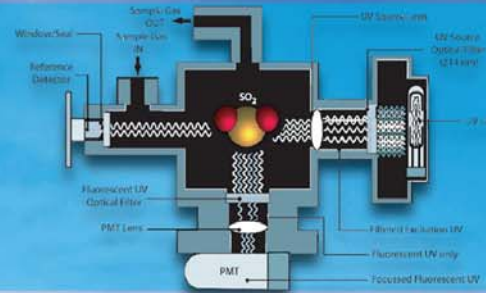
Sulphur dioxide is one of the major precursors of acid rain, which has acidified soils, lakes and streams, accelerated corrosion of buildings and monuments, and reduced visibility.

Sulphur Dioxide and the airpointer®

Measurement Principle: Ultraviolet Fluorescence (EN 14212)

SO₂ / Ultraviolet fluorescence:

The sample gas is lighted with an UV lamp, which causes the sulfur dioxide part of the gas to absorb energy. The absorbed energy is emitted as a light pulse (photon) shortly afterwards, which is measured with a photo multiplier tube.



Component	EU Directive Methodology	Measurement Principle	Range	Units	Lower Detectable Limit	Zero Drift	Span Drift
Sulphur Dioxide (SO ₂)	Ultraviolet Fluorescence (EN 14212)	Ultraviolet Fluorescence	Dynamic range up to 20 ppm	ppb, ppm, mg/m ³ , µg/m ³	< 1.0 ppb	< 1,0 ppb/24 hours, 2,0 ppb/7 days	< 1,0 % of reading/24 hours < 2,0 % of reading/7 days



LIVE ON AIR



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Patents Pending

