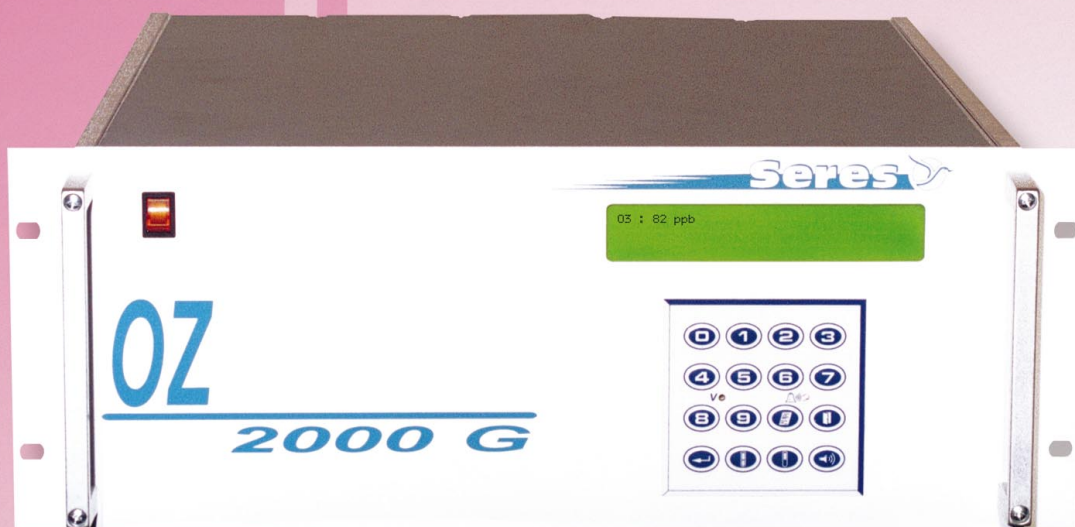


# O<sub>3</sub>

## U.V. Photometric Ozone Analyser

# MODEL OZ 2000 G

FRENCH STANDARD AFNOR X 43.024



### AMBIENT AIR

Series 2000 G is a line of ambient air analysers using the same printed circuit boards. "Physics" measurement principles associated to digital electronics designed around a 16-bits microprocessor gives the operator the necessary security for the monitoring and control of our environment.

### ANALYSER ENSURING ENVIRONMENTAL PROTECTION

The OZ 2000 G is an advanced design analyser that incorporates the latest achievements in continuous ozone measurement.

- A 4 x 40 character digital display and 16-keyboard permit a dialogue between operator and analyser. Several menus are available for maintenance aid, calibration, zeroing...
- Continuous microprocessor self-diagnostic with display and remote transmission
- Digital signal processing. This new and advanced design improves accuracy while maintaining a very short response time.
- Internal measurement storage memory with data transfer to computer or printer via RS 232 C output.
- Easy to clean single path optical cell.
- Pressure and temperature corrections.

**Seres**  
ANALYSERS

AIR QUALITY UNDER STRICT SURVEILLANCE



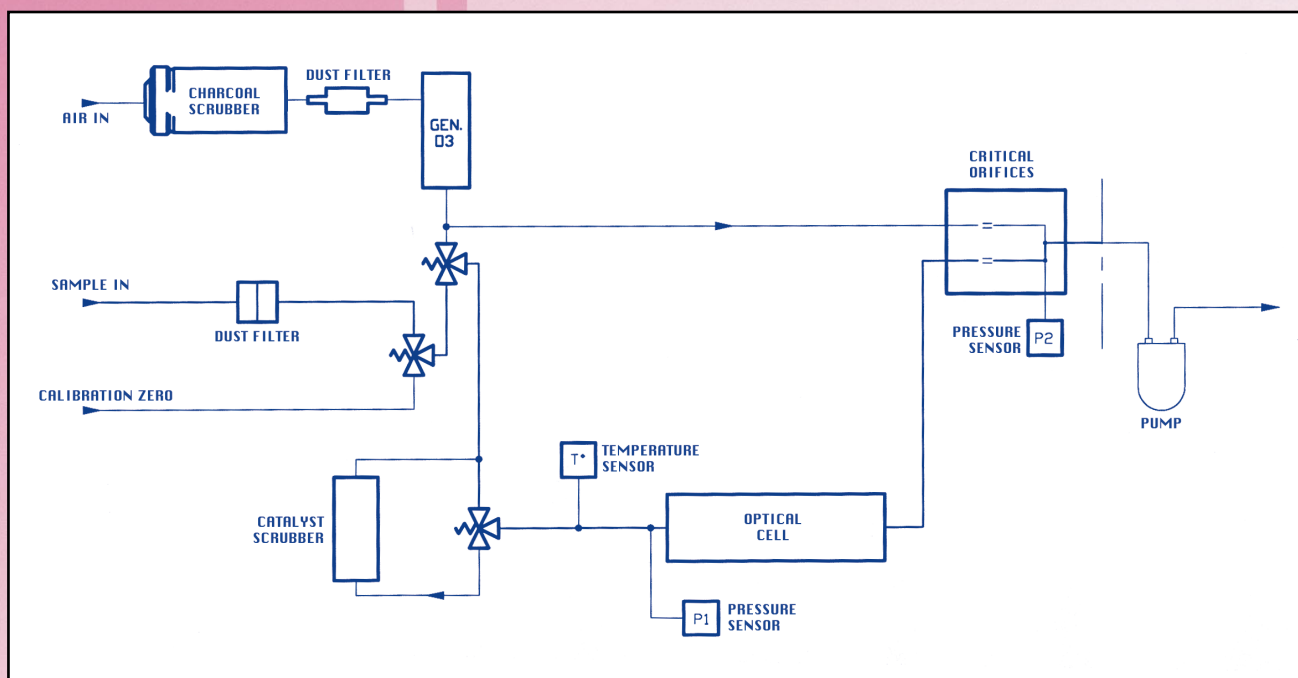
# MODEL OZ 2000 G

FRENCH STANDARD AFNOR X 43.024

## PRINCIPLE

The concentration of ozone is determined by the attenuation of 254 nm UV light along a single path cell. The ozone absorption of UV light is proportional to the ozone concentration in the atmosphere. Since a reference condition is required, a switching solenoid valve is incorporated to alternate between the reference mode and the sample mode. A catalyst is employed to destroy ozone while operating in the reference condition. This catalyst scrubs only ozone. The Beer-Lambert law is then used to calculate the concentration of ozone. It is an absolute measurement unbiased by

interferents, dust or source intensity since there are internal corrections for temperature and pressure. A 16-bits microprocessor ensures calculations and monitors key parameters such as source intensity, temperature, critical voltage and self-diagnostic tests. The same adaptative data filter used with the other Series 2000 analysers provides rapid response during transient conditions yet smooth stable data during periods of small changes. On option an internal zero-span system provides a source of zero air and known concentration of ozone.



## TECHNICAL SPECIFICATIONS

- **Ranges** : 0.1 -0.5-1 -5 and 10ppm.
- **Lower detectable limit** : < 1 ppb.
- **Response time** : from some 10 seconds to 2 minutes.
- **Zero drift** : < 2 ppb per week.
- **Span drift** : < 2 % per month.
- **Linearity** :  $\pm 1$  % Full Scale.
- **Operating temperature** : 0 - 40° C.
- **Humidity** : 0 - 96 % non condensing.
- **Power consumption** : 100 V.A.
- **Power supply** : 220 V - 240 V / 50 Hz.
- **Mounting** : standard 19", 4 units rack, H = 180 mm, W = 480mm, D = 540mm
- **Flowrate** : 1 to 2 l/min.
- **Pressure compensation** : from -200 to 3000 m
- **Analog output** : 4 - 20 mA with galvanic insulation (other outputs on request).
- **Digital output** : RS232 C
- **Printer interface**
- **Options** : internal zero/span system  
Ozone Generator

SPECIFICATIONS ARE PER US E.P.A. AND GERMAN U.B.A. TEST CRITERIA. ALL US E.P.A. SPECIFICATIONS EXCEEDED.

**Seres**  
ANALYSERS

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