

**AO2000 Series
Infrared Analyzer Module
Uras14**

Manufacturer:

ABB Automation GmbH, Frankfurt, Germany

TÜV SÜD Industrie Service GmbH hereby certifies that AO2000-Uras14 has achieved the following results for emission monitoring at a waste incinerator and meets the requirements for facilities requiring authorization and to German 27th BImSchV and TI-Air regulations-, as well fulfills the requirements for

QAL 1

according to EN 14181 and EN ISO 14956

(e.g. waste incineration plants 17th BImSchV, large furnaces 13th BImSchV and others,...).

Smallest measurement ranges tested:

CO	0-75 mg/m ³	NO	0-200 mg/m ³
SO ₂	0-75 mg/m ³	O ₂	0-10 / 25 Vol.-%

Availability

> 98 % over a 3 month period for two independent systems including sample conditioning

Drift:

With internal automatic calibration of zero point with ambient air (interval 24 h) and span point with calibration cells (interval weekly):

Zero point drift: < 2 % of span per year

End point drift: < 4 % of set point per year

The automatic calibration unit for zero and span point must be checked yearly.

Cross sensitivity:

Sum of all cross sensitivities for above mentioned components against SO₂, NO, O₂, CO₂, NH₃, NO₂, CH₄, N₂O, CO and H₂O in typical flue gas concentrations < 4 % of measurement range.

Detection limit:

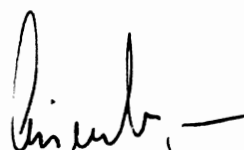
CO	≤ 0.2 % f.s.	NO	≤ 0.3 % f.s.
SO ₂	≤ 0.4 % f.s.	O ₂	≤ 0.1 Vol.-% O ₂

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Dr. A. Brandl

München, June 2006



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