

LOPAP-03 (HONO) QUMA

Description of the instrument:

The LOPAP instrument is a continuously working in situ instrument to measure nitrous acid (HONO) in the gas phase by wet chemical sampling and photometric detection. Nitrous acid (HONO) is of particular importance for atmospheric chemistry, since its photolysis leads to the formation of OH radicals. In addition, HONO, which is carcinogenic, is an important indoor pollutant. The LOPAP instrument can be used for ambient air measurement, for indoor monitoring and exhaust gas measurements in the concentration range of a few ppt up to some ppm. Caused by the two-channel concept of the instrument, interferences can be neglected in contrast to most other available HONO measurement techniques. The instrument can also be used for the determination of very low nitrite concentrations in aqueous samples.



Features of the LOPAP-03 (HONO) instrument:

- Extreme sensitivity:
- Wide range of applications:
- Time resolution:
- Accuracy:
- Precision:
- Free of sampling artefacts:
- Interferences can be neglected:

- Compact design:

- Data Output

- Power supply

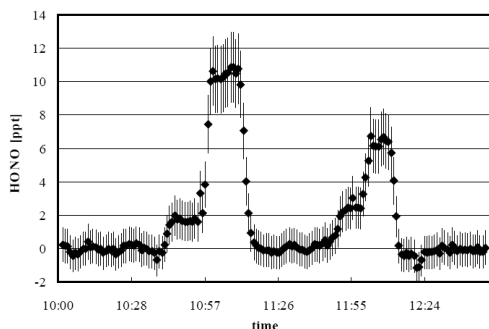
- Easy calibration with liquid nitrite standard
- Order number:

Detection limit 1-2 ppt
Measurement range 5 ppt – 2 ppm
1-5 min (dependent on measurement range)
ca. 10 % \pm 2 ppt
ca. 1 %
no sampling lines used (external sampling unit)
tested for NO₂, NO₂+O₃, NO₂+SO₂,
NO₂+hydrocarbons, NO₂+diesel exhaust, NO, HNO₃,
HNO₃+HCHO, O₃, PAN, alkyl nitrates.
19 inch instrument (width) 445 mm,
height 270 mm, depth 510 mm
interface to a DAQ-700 PCMCIA type A/D
Converter to the PC (notebook).
24 V/DC and 100 - 250VAC 50 - 60 Hz

Q003.500

Cooperation:

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Example of HONO measurements in the ppt range with pure HONO source

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