

Ozzo-3

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Data sheet

2018

UV spectrometry analyser in 19" standard 4U chassis for very accurate O₃ analysis

Ozone Analyser

for air quality monitoring



Ozzo-3 analyser adopts ultraviolet spectrometry principle and combined with advanced microprocessor technology it provides accurate and reliable detection of Ozone at ppb and ppm level to meet the requirement of ambient gas monitoring.

Ozzo-3 emphasizes fast response time, repeatability, overall accuracy and ease of operation.

Quite convenient solution for supervision department to estimate air quality.



Performance Specification

Measuring Principle	UV spectroscopy
Measurement Range	0-500 ppb.....0-50 ppm customizable (can be switched by menu)
Unit	ppb, ppm, µg/m3, mg/m3
Lower detection limit	≤ 0.4 ppb
Zero Noise	≤ 2. ppb
Span noise	≤ 2.5 ppb
Accuracy	≤ ±1% FS
Repeatability	≤ ±1% FS
Linearity	≤ ±1% FS
Zero Drift	0.5 ppb (24 h); 1 ppb (7 days)
Span Drift	≤ ±1% FS (24 h); ≤ ±1% FS (7 days)
Long term zero drift	±1 ppb (7 days)
Long term span drift	±1% FS (7 days)
Calibration Cycle	1 time / week suggested
Enclosure Rating	IP54
Response Time	≤ 20 sec. at T90

Signals

Analog Output	4 x 4-20 mA isolated (max. load 750 Ω)
Digital Output	RS232 / Ethernet / USB (RS485 available)
Protocol	ModBus
Relay Output	8 x (24V, 1A)

Operative Specification

Sample Gas Flow	800 ± 10% cc/min.
Sample Gas Interface	Ø6 Bi-lok (or Ø1/4", PTFE material)
Power Supply	200 ÷ 240 V, 50/60 Hz., 200W
Ambient Temperature	+5°C....+40°C
Ambient Humidity	0 ÷ 95% RH non-condensing

Physical Specification

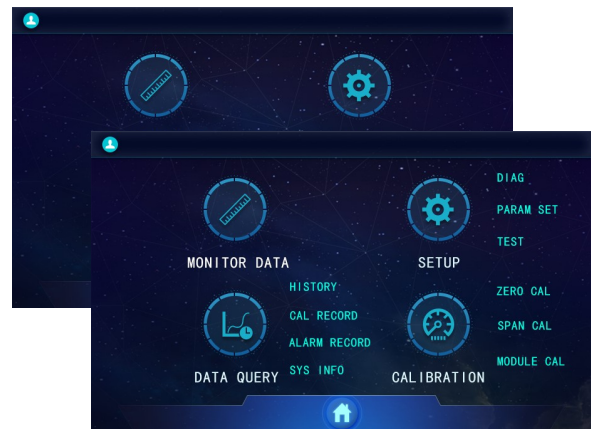
Outline Dimensions	178(H) x 432(W) x 613(D) mm
Weight	~ 15 Kg.

Features

- 19" standard 4U panel chassis, modular design, easy integration with other instrument
- Main gas circuit component include: sampling diaphragm pump, flow plug, pressure sensor, flow sensor, three-way solenoid valve etc.
- Ultraviolet spectrometry principle
- Microprocessor based
- Continuous self-checking with alarm function
- Bidirectional RS232 port for remote control
- Self-checking for intensity decaying of light source
- Digital output working parameter
- Response time optimized by signal filter technology of self-adaption
- Compensate function for temperature and pressure
- USB and Ethernet interface
- Large memory and history data saved automatically

European Compliance

- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU



User friendly menu through colorful touch screen operation

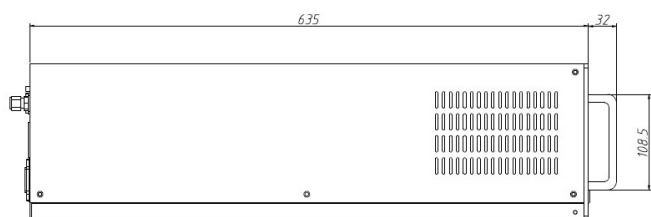
Measuring Principle

UV absorption Ozone analyser is developed based on Beer-Lambert technology. It is applied to monitor concentrations O3 in ambient air. 254 nm UV light passes through sample cell and absorbed by ozone inside it. Absorption value has certain ratio with O3 concentration.

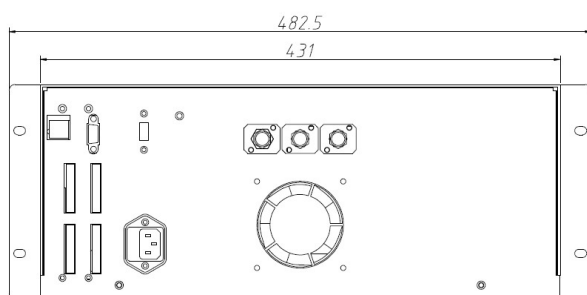
By cyclically alternating of magnetic valve and measuring sample gas and the sample without O3, the true and reliable measured concentration of Ozone is obtained at last. This analyser can completely control all functions and also provide online instruction for important work parameters. Real time auto compensation for temperature and pressure will be made during measurement.

Dimensions

Contacts



Side View



Rear View

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