

DATA SHEET: UVO-560 High Concentration Ozone Analyzer

Precision UV Absorption Technology for Industrial Ozone Monitoring

1. PRODUCT OVERVIEW

The **UVO-560** is a high-precision analyzer designed to calculate ozone concentration based on the Beer-Lambert Law. By measuring the intensity change of ultraviolet light (254 nm) before and after absorption, it provides accurate and stable readings for high-concentration ozone environments. The instrument features a dual-channel optical system and an intelligent lamp management system, ensuring rapid stabilization and long-term reliability in demanding industrial applications.

2. KEY FEATURES

- Dual-Channel UV Optics:** Advanced 254 nm dual-beam technology ensures superior stability and minimal drift.
- Intelligent Lamp Management:** Optimized control system allows the UV lamp to reach operational status quickly after startup.
- Integrated Gas Control:** Equipped with a built-in gas filter, regulating valve, and flow meter for comprehensive gas management.
- High-Pressure Resistance:** Leak-proof design engineered to withstand inlet pressures up to 0.25 MPa.
- Safety Focused:** Includes an integrated ozone exhaust gas processor to prevent hazardous leakage.
- Versatile Connectivity:** Standard RS485 (Modbus) digital interface with 4-20mA and 0-10V analog outputs for easy system integration.

3. TECHNICAL SPECIFICATIONS

Feature	Specification
Detection Principle	UV Absorption (Beer-Lambert Law) at 254 nm
Detection Range	0 - 200 g/m ³ NTP
Display Resolution	0.01 g/m ³ NTP
Concentration Error	± 0.8% Full Scale
Response Time	≤ 2 s
Zero Drift	< ± 0.2% Full Scale (Max ± 0.6 g/m ³)
Input Gas Flow	0.1 - 1 L/min
Inlet Pressure	< 0.25 MPa

Feature	Specification
Signal Outputs	4-20mA, 0-10V, RS485
Dimensions (LWH)	300 × 200 × 120 mm
Net Weight	5.1 kg

4. SAFETY PRECAUTIONS

- **Toxicity Warning:** High-concentration ozone is toxic; ensure appropriate safety venting and protective devices are used.
- **Environment:** Do not operate the instrument in oxygen-rich or hazardous explosive environments.
- **Chemical Safety:** If the feed gas contains nitrogen, vent exhaust gas through a specialized processor to prevent corrosive nitric acid formation upon contact with ambient humidity.
- **Maintenance:** Ensure the gas line is depressurized and free of ozone before opening the gas filter.

5. STANDARD ACCESSORIES

- UVO-560 Main Unit
- Integrated Gas Processing Kit
- Power Cable
- **Factory Calibration Report**
- User Manual

Manufactured by:
Honri Airclean Technology (Suzhou) Co., Ltd.