

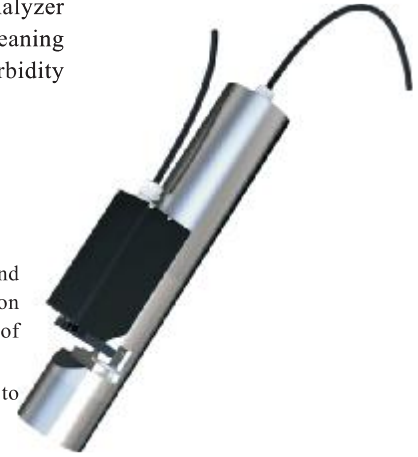
# WDet-5000UVI Immersion UV Water Analyzer

## Overview

WDet-5000UVI is the first full-spectrum (200nm-800nm) immersion UV water analyzer at home. With features of delicate and convenient structure, plug and play, auto cleaning function, it can be widely applied to measure indexes including COD, BOD and turbidity in surface water, underground water and municipal sewage.

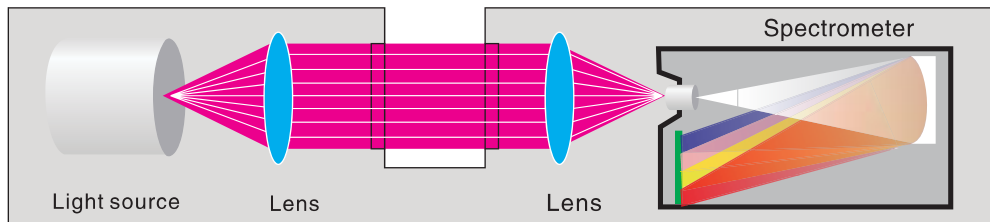
## Feature

- Adopt full-spectrum (200nm-800nm) (UV-visible light) measurement technology and chemometrics algorithm. Compared with dual wavelength background deduction technology, it can measure more parameters and be less affected by composition change of sewage.
- Use high-pressure gas to clean probe automatically, or employ immersion electrical brush to clean.
- Not required for reagent preparation; save operating cost and no secondary pollution
- Fast response time (about 2s), applied to occasions with high requirement for real-time
- Without interference by chloridion

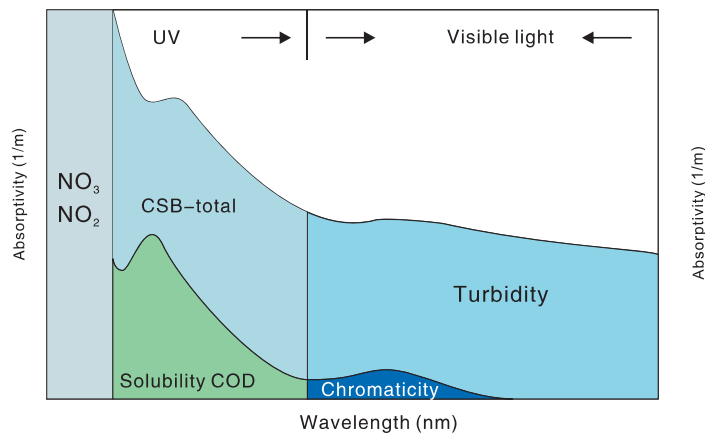


## Technical Principle

The analyzer adopts pulse xenon lamp as light source and ultraviolet spectrometer as detector, which can collect absorption spectrum of water pollutions between 200nm and 800nm in real time. The water pollutant content can be analyzed in real time through chemometrics algorithm technology. The optical path is shown as the following figure.



Spectral probe can record complete spectrum between 200nm to 800nm (UV-visible light) and distinguish the spectrum into 256 wavelengths to obtain "Spectral fingerprint". It can monitor multiple parameters simultaneously through the information contained in spectral fingerprint and compensate those parameters aiming at possible cross sensitivity. The relevance between measuring result and laboratory result achieves high quality that simple optical instrument can never obtain before.



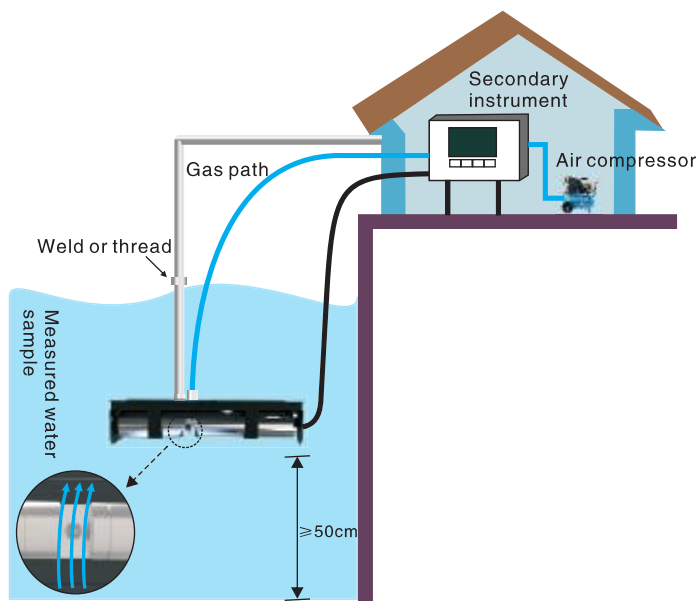
# First Full-spectrum Immersion UV Analysis Artifact

Wavelength range covers from 200nm to 800nm, able to measure more parameters

## Technical specification

Measuring method	UV/visible light DOAS, wavelength range: 200–800nm
Power supply	12VDC
Linearity	2%FS
Zero drift	< 1%FS
Range (COD)	0~50~200mg/L, larger range is customizable
Measurement interval	Minimum 60s, period can be set
Probe immersion depth	< 10m
Optical path	Adjust according to actual working condition
Water temp requirement	5°C ~ 45°C
Probe IP grade	IP68
Cleaning method	Gas purging or immersion electric brush
Auto cleaning period	External control
External interface	RS232, MODBUS protocol
Probe dimension	Φ60mm × 380.5mm
Probe weight	< 3kg
Auto compensation of cross sensitivity	Turbidity/organicsubstance
Measuring rang of Integrated temp	-10°C ~ 50°C
Temperature sensor resolution	0.1°C

## Installation Diagram



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