UV254 ONLINE ANALYZER

(M) SERIES

FEATURES & BENEFITS

- Practical, accurate and affordable
- Real-time UVT or UV254 organics monitoring
- Patented technology provides superior measurement performance
- Operator friendly, low maintenance design
- Wastewater to high purity measurement ranges
- Innovative custom calibration feature
- Simple to install and easy to operate

OVERVIEW

Real Tech's UV254 online analyzer provides rapid real-time measurement of organic matter in water or wastewater. Continuous organic monitoring can bring significant value to many applications including UV disinfection performance and efficiency, coagulation dose optimization, DBP formation potential, source water monitoring and so much more. Real Tech's UV254 M series is cost effective and accurate, making it a practical choice for many applications where alternative organics monitoring solutions would be too costly and complex.

MEASUREMENT PRINCIPLE

The M series UV254 analyzer utilizes light at a 254 nm wavelength as most organic compounds, specifically aromatic organics, absorb light at this wavelength. Benefiting from Real Tech's patented Ortho-Beam technology and innovative Split-Sense Pro technology, lamp drift and fluctuations are compensated for, providing an accurate and stable output overtime. Measurement can be expressed as UVT or UV254.

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

UV254 ANALYZER SPECIFICATIONS

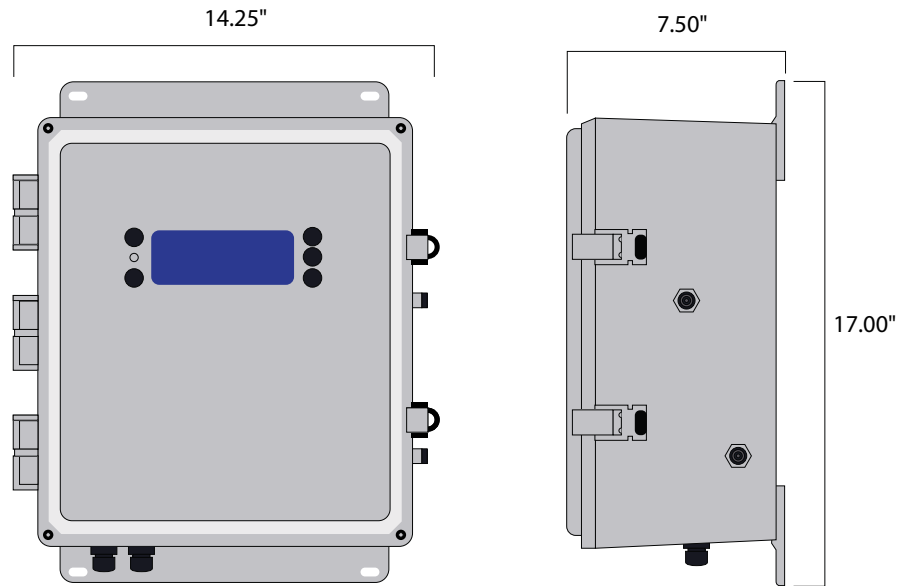| CHARACTERISTIC	TECHNICAL DATA		
Model Series	2000 series	3000	4000 series
Path Length	1, 2, 4, 8 mm	10 x 20 mm	50, 100,150, 250 mm
Technology	Split-Sense Pro	Ortho -Beam	Split-Sense Pro
Parameters	UVT, UV254		
Range	Depends on model selected. Refer to range chart.		
Accuracy	± 0.5% FS		
Units	% or cm^{-1}		
Sampling Time	10 seconds		
Calibration	In-situ zeroing to any sample with known UVT. No further calibration required.		
Cleaning	In-situ chemical cleaning makes cleaning quick and easy. Automatic chemical cleaning is optional.		
Self-Diagnostics	Detection and diagnosis of internal system fault		
Operator Interface	Five push buttons to control a comprehensive hierarchical menu system		
Display	4 line x 20 character back-lit LCD with LED alarm		
Alarms	Dry contact terminals allow for operator configurable alarms for: high and low set points, low lamp output, leak detected, system fault, etc.		
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system		
Outputs	Self-powered 4-20 mA, RS232 serial for PC		
Wavelength	253.7 nm (optional 550 nm turbidity compensation upgrade)		
Light Source	Low-pressure mercury UV lamp		
Lamp Life	2 years		
Flow Rate	300-1000 mL/min		
Pressure Rating	20 PSI maximum		
Fluid Connections	1/4" OD tube push-in fittings		
Wetted Materials	Kynar, Polyethylene, Quartz, SS 316L, Viton		
Electrical	24VDC 40W power adapter (accepts 90-250VAC 50/60Hz)		
Ambient Temp.	0 to 45°C (32 to 113°F)		
Water Temp.	0 to 90°C (32 to 194°F) at 21°C (69.8°F) Ambient temperature		
Storage Temp.	-20 to 60°C (-4 to 140°F)		
Enclosure	NEMA 4X, wall mountable		
Weight	22 lb		24 lb
Dimensions	17"H x 14.25"W x 7.5"D		17.75"H x 15.5"W x 6.75"D
Warranty	2-year limited warranty (Extended care packages available)		
Analyzer Upgrades	Turbidity Comp. Upgrade, Cellular Modem, Dual Transmitter		

* Technical Specifications are subject to change without notice.

* Water temperature range based on material compatibility only. Contact Real Tech to verify application.
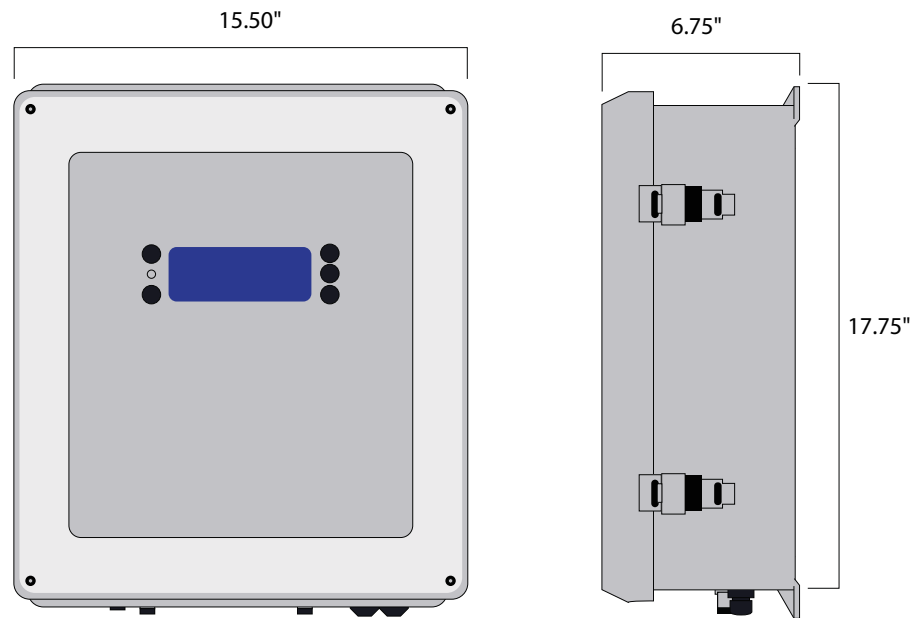
DIMENSIONS

The UV254 analyzer is a bypass cabinet instrument installed directly on a wall, railing or system backboard. Sample is supplied to the analyzer from either a pressurized source or from an open-channel using an accessory pumping system.

DIMENSIONS FOR M2000 SERIES AND M3000 MODELS

14.25"

7.50"

17.00"

DIMENSIONS FOR M4000 SERIES MODELS

15.50"

6.75"

17.75"

ANALYZER SELECTION

MODEL SERIES	DESCRIPTION
2000 / 3000	Ideal for general water monitoring applications
4000	Ideal for high purity water monitoring applications

ANALYZER MODELS & RANGE

Includes UV254 analyzer, flow cell, calibration bottle, dehumidifier and standard power supply.
Automatic chemical cleaning system and additional accessories sold separately.

MODEL #	PATH LENGTH	UV254 (cm^{-1})	UVT (%)
M2010	1 mm	0 - 20	0 - 100
M2020	2 mm	0 - 10	0 - 100
M2040	4 mm	0 - 5	0 - 100
M2080	8 mm	0 - 2.5	1 - 100
M3000	10 mm x 20 mm	0 - 1	10 - 100
M4050	50 mm	0 - 0.4	40 - 100
M4100	100 mm	0 - 0.2	63 - 100
M4150	150 mm	0 - 0.13	74 - 100
M4250	250 mm	0 - 0.08	83 - 100

* Stated ranges are approximate, dependent on industry, site and application - contact Real Tech to confirm model selection

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
UVT-078130	Real Clean System I	Automatic chemical cleaning system for use with 2000 and 3000 series models
UVT-118010	Real Clean System II	Automatic chemical cleaning system for use with 4000 series models
UVT-079121	Pump Clean System I	Self-priming pump and automatic chemical cleaning for use with 2000 and 3000 series models
UVT-129122	Pump Clean System II	Self-priming pump and automatic chemical cleaning for use with 4000 series models
UVT-078120	Dual Feed I	Dual feed upgrade to monitor two water sample lines with one M series analyzer