

# UV254 ONLINE ANALYZER

## M SERIES



### FEATURES & BENEFITS

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

MUNICIPAL DRINKING WATER  
MUNICIPAL WASTEWATER  
INDUSTRIAL PROCESS WATER  
INDUSTRIAL WASTEWATER

WATER QUALITY  
MONITORING  
SOLUTIONS

### 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 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 innovative Ortho-Beam and Split-Sense Pro technologies, lamp drift and fluctuations are compensated for, providing an accurate and stable output overtime. Measurement can be expressed as UVT, UV254 or correlated output of TOC, DOC or colour.



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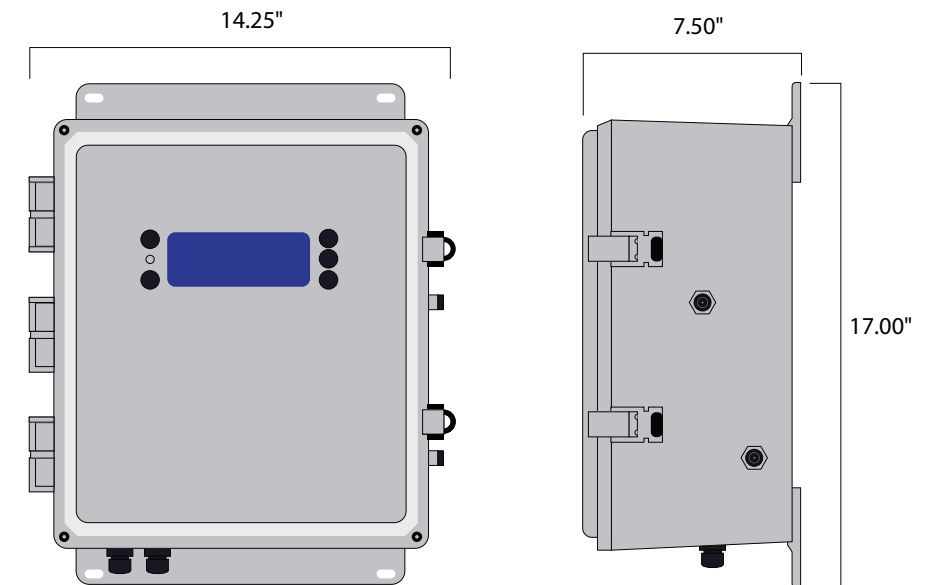
# UV254 ANALYZER M SERIES SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA									
	MODEL	M2010	M2020	M2040	M2100	M3000	M4050	M4100	M4150	M4250
Path Length	1 mm	2 mm	4 mm	10 mm	10 mm x 20 mm	50 mm	100 mm	150 mm	250 mm	
Technology		Split-Sense Pro			Ortho -Beam		Split-Sense Pro			
Parameters	UVT, UV254 or correlated parameter (TOC, DOC, colour)									
Range	Depends on model selected. Refer to range chart on next page.									
Accuracy	± 0.5% FS									
Units	% or cm <sup>-1</sup> (mg/L correlated value)									
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									
Enclosure	NEMA 4, wall mountable									
Flow Rate	300-1000 mL/min									
Pressure Rating	20 PSI									
Fluid Connections	1/4" OD tube push-in fittings									
Electrical	24VDC 40W power adapter (accepts 90-250VAC 50/60Hz)									
Storage Temp.	-20 to 60°C (-4 to 140°F)									
Operating Temp.	0 to 45°C (32 to 113°F)									
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, High Temp. Upgrade I, High Temp. Upgrade II, Cellular Modem, Dual Transmitter									

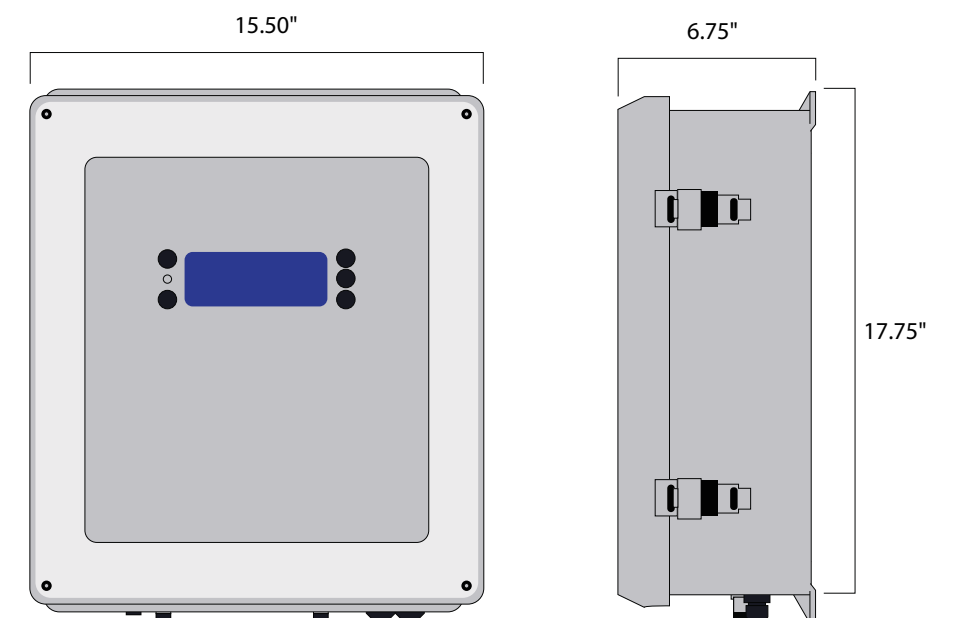
## DIMENSIONS

M series analyzers are bypass cabinet instruments 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



### DIMENSIONS FOR M4000 SERIES MODELS



\* Technical Specifications are subject to change without notice.

## MODELS & RANGE

M series models include 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 <sup>-1</sup> )	UVT (%)	TOC (mg/L)	DOC (mg/L)	COLOUR (PCU)
M2010	1 mm	0 - 20	0 - 100	0 - 1200	0 - 800	0 - 6000
M2020	2 mm	0 - 10	0 - 100	0 - 600	0 - 400	0 - 3000
M2040	4 mm	0 - 5	0 - 100	0 - 300	0 - 200	0 - 1500
M2100	10 mm	0 - 2	1 - 100	0 - 120	0 - 80	0 - 600
M3000	10 mm x 20 mm	0 - 1	10 - 100	0 - 60	0 - 40	0 - 300
M4050	50 mm	0 - 0.4	40 - 100	0 - 24	0 - 16	0 - 120
M4100	100 mm	0 - 0.2	63 - 100	0 - 12	0 - 8	0 - 60
M4150	150 mm	0 - 0.13	74 - 100	0 - 8	0 - 5.3	0 - 40
M4250	250 mm	0 - 0.08	83 - 100	0 - 4.8	0 - 3.2	0 - 24

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

\* Approximation of colour measurement based on UV254

## 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



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