

PERMANGANATE SENSOR

PML SERIES



FEATURES & BENEFITS

- Affordable, real-time permanganate monitoring
- Outputs as permanganate (mg/L or µg/L)
- Operator friendly, low maintenance design
- Quick and simple optical measurements
- Long life LED technology
- Reagent free operation

WATER QUALITY
MONITORING
SOLUTIONS

REAL-TIME MONITORING SOLUTION

Permanganate Sensor

Real Tech's bypass Permanganate sensor has a very low detection limit that provides an early warning of overdosing, well before residual permanganate is visible in water. Designed with LED technology, this practical and affordable sensor measures permanganate continuously in real time.

Controllers and Accessories

Our innovative modular product platform ensures our clients gain the real-time water quality monitoring system that meets their specific demands and budget. With multiple controller and accessory options available such as automatic chemical cleaning systems that lower maintenance while improving system performance, Real Tech provides a total solution for all of your unique water quality needs.

Liquid Ai Compatible

Our Liquid Ai data services complement our real-time water quality monitoring systems. Our Remote Monitoring platform is a powerful data management and visualization tool that enables access to data anywhere, anytime.

MEASUREMENT PRINCIPLE

Real Tech's Permanganate sensor uses the absorbance of light at multiple wavelengths to accurately detect permanganate levels. Compounds that may interfere with measurement, such as particles, are compensated for using additional reference wavelengths. The sensor uses a unique long path length measurement cell which enables the detection levels and sensitivity required in drinking water applications. The result is reliable, low-cost, real-time measurement of permanganate in water.



PERMANGANATE SENSOR SPECIFICATIONS

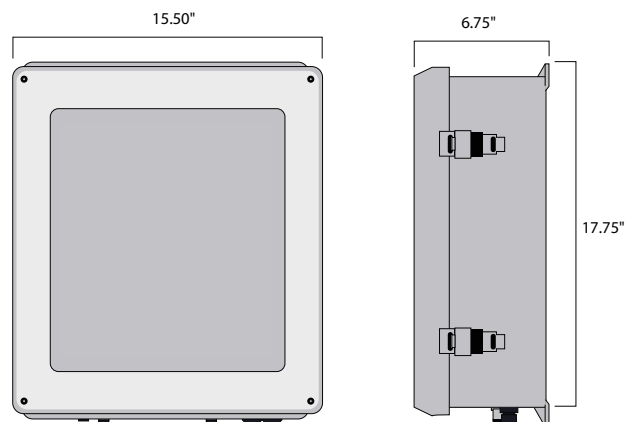
CHARACTERISTIC	TECHNICAL DATA			
MODEL	PML4025	PML4050	PML4100	PML4150
Path Length	25 mm	50 mm	100 mm	150 mm
Parameter	Permanganate			
Range	Depends on model selected. Refer to range chart on page 4.			
Units	mg/L, ug/L, ppm, ppb			
Sampling Time	30 seconds			
Calibration	Factory calibrated. Field adjustment of calibration is possible.			
Cleaning	In-situ chemical cleaning makes cleaning quick and easy. Automatic chemical cleaning is optional.			
Self-Diagnostics	Detection and diagnosis of internal system fault			
Alarms	Dry contact terminals allow for operator configurable alarms for: high and low set points, low lamp output, leaks, system fault, etc.			
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system			
Wavelength	Multiple wavelengths			
Light Source	LED			
Flow Rate	300-1000 mL/min			
Pressure Rating	20 PSI maximum			
Fluid Connections	1/4" OD tube push-in fittings			
Electrical/Comm.	From controller			
Storage Temp.	-20 to 60°C (-4 to 140°F)			
Operating Temp.	0 to 45°C (32 to 113°F)			
Enclosure	NEMA 4X, wall mountable			
Weight	24 lb			
Dimensions	17.75"H x 15.5"W x 6.75"D			
Warranty	2-year limited warranty (Extended care packages available)			
Sensor Upgrades	High Temp. Upgrade II			

* Technical Specifications are subject to change without notice.

DIMENSIONS

The permanganate sensors is a bypass cabinet instrument installed directly on a wall, railing or system backboard. Sample is supplied to the sensor from either a pressurized source.

DIMENSIONS FOR PERMANGANATE SENSOR



SENSOR MODELS & RANGE

Includes permanganate sensor, flow cell, calibration bottle and dehumidifier.
Controller and accessories sold separately.

MODEL#	PATH LENGTH	PERMANGANATE (mg/L)	PERMANGANATE (µg/L)
PML4025	25 mm	0.1 - 20	100 - 20,000
PML4050	50 mm	0.05 - 10	50 - 10,000
PML4100	100 mm	0.025 - 5	25 - 5,000
PML4150	150 mm	0.02 - 3.5	20 - 3,500

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

CONTROLLERS

PRODUCT #	NAME	DESCRIPTION
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display for sensors
S-11TPC	Real Controller Pro	Wall mounted controller with touch panel PC interface (PC inside cabinet model)
S-11TPCD	Real Controller Pro	Wall mounted controller with touch panel PC interface (PC external on door model)

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
UVT-118010	Real Clean System II	Automatic chemical cleaning system for use with 4000 series models
S-1789121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

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