Lovibond® Water Testing

Tintometer® Group



PTV2000 Process Turbidimeter with Flow Indicator & Profibus; Red Light Source, EPA

Process Turbidity Simplified



- Online Turbidimeter approved for EPA reporting purposes
- Touchscreen display eliminates need for a separate controller
- Integrated flow indicator ensures sample is flowing
- Approved by Texas TCEQ as an alternative method for monitoring individual filter effluent from membrane units used for pathogen removal

Part Number: 6144613

Process Simplified - A New Approach

Details Matter. The development of the PTV Series considered every aspect of process turbidity workflow - from installation and setup; daily measurement and control; routine procedures such as calibration, verification and maintenance; to data collection and management.

Smart User Interface - Rethink the Controller

We've replaced the need for a traditional controller with the familiar interface of a smart device. By utilizing a mobile device app, the user experience is enhanced by allowing quick and easy data viewing, calculation of statistics and access to operator instructions and useful tips.

Designed to Save

Save time, money and water by using the PTV system. These instruments are optimized for drinking water applications with unsurpassed low range accuracy (below 1 NTU). It has a variety of features that help users save.

Regulatory Compliant

The PTV Series has instruments that meet EPA and ISO regulatory requirements.

Fluidics Manager

The Fluidics Manager is an additional accessory that streamlines sample flowing into and out of the instrument. This eliminates the need to install and maintain separate devices to control sample entering and exiting the sensor.

Panel Mounting System

A Place for Everything - The Panel Mount is an additional accessory that aids in the installation of key instrument components and accessories.

Two Ways to Interface

Touchscreen Interface - All PTV Series instruments are supplied with an integrated touchscreen. All measurement settings and routine functions such as calibration can be managed directly with the touchscreen without the need for additional devices.

AquaLXP™ Interface - The AquaLXP™ app is an enhanced version of the touchscreen. In addition to being able to perform all of the functions as the touchscreen, users have access to animated instructions of all procedures, advanced data analysis and statistics tools, complete maintenance and repair logs as well as the comfort of using a familiar device.

Wet Standards - for Calibration & Verification

T-CAL Turbidity Standards from Lovibond® Tintometer® are primary standards that are US EPA and ISO compliant.

When you combine our T-CAL Turbidity Standards and our T-CALplus™ packaging, turbidity standards have never been easier to

Industry

Municipalities

Application

Drinking Water Treatment

PTV2000 Process Turbidimeter with Flow Indicator & Profibus; Red Light Source, EPA

The PTV2000 Process Turbidimeter utilizes a red LED light source for monitoring filter effluent in a regulatory environment. The red light improves the limit of detection over traditional tungsten light sources, so operators can see changes in turbidity faster.

The instruments are designed to consider every aspect of an operators' work flow with an emphasis on simplicity and accuracy.

Measuring Range

Test Name	Measuring Range	
Turbidity	0.0001 - 100 NTU	

Technical Data

Optics	Red LED
Accuracy	±2 Percent of reading or smaller 0.008 / 8 mNTU
Display	Touchscreen
Stray Light	smaller 0.008 / 8 mNTU
Displayed Resolution	up to 0.0001 NTU (range dependent) or 5 digits displayed
Repeatability / Precision	better than 1% at 1 NTU
Initial Response	10 % change: 15 seconds @ max flow
Step Response	(T-90), less than 240 seconds at 200 ml/min. at 1 NTU
Signal Averaging	User Selectable: 1, 3, 6, 10, 30, 60, and 90 seconds, defaulted to 30 seconds
Sample Temperature	0 - 50 °C (32 to 122 °F) max sample temperature: 70 °C (158 °F)
Sample Flow	30 to 500 ml/min, optimal flow: 50 to 80 ml/min
Sample Inlet Connection	1/4-inch NPT female, 1/4-inch compression fitting tubing (included)
Sample Outlet (Drain) Connection	3/8-inch NPT female, 3/8-inch hose barb tubing (included)
Power Requirements	90 to 264 VAC, 50/60 Hz. Auto Select
Sample Inlet Tubing	1/4-inch OD or 6 mm OD
Sample Oulet Tubing	3/8-inch OD or 9 mm OD
Turbidimeter Body Drain	Quick connect with integrated check valve
Calibration	One Point Calibration at 5.0 or 20 NTU with any regulatory approved formazin
Analog Output: Measurement Module	1 selectable 0 - 20 mA or 4 - 20 mA; output span programmable over any portion of the measurement range
Analog Output: Junction Box	1 selectable 0 - 20 mA or 4 - 20 mA; output span programmable over any portion of the measurement range
Alarms	Three set-point alarms, each equipped with an SPDT relay with unpowered contacts rated 5 A resistive load at 230 V, AC
Digital protocol	Profibus DP
Enclosure Type: Junction Box	Fiber reinforced polyester
Enclosure Rating: Junction Box	IP 66
Safety	Listed by TÜV Rheinland to UL 61010A-1: Certified by TÜV Rheinland to CSAC22.2 No. 1010.1: CE Certified by TÜV Rheinland to EN 61010-1
Immunity	CE certified by TÜV Rheinland to EN 61326 (Industrial Levels)

Mounting Hardware	Turbidimeter Sensor - Slotted Mounting Bracket that can be affixed to any vertical surface or panel (Optional). Junction Box - Direct mounting to any vertical surface or panel (Optional)
Method of Verification	Wet Standards or dry verification device
Limit of Determination	0.0001 NTU
Limit of Detection	0.001 NTU
Flow Indicator	yes
Portability	Process
Environmental Conditions	5 - 50 °C (41 to 122 °F), rel. humidity 5 - 95 % (Noncondensing)
Stock Conditions	-40 - 60 °C (-40 - 140 °F)
Compliance	EPA
Dimensions	158.5 x 340.4 x 334.5 mm

Assembly, Float 19806-054 Assembly, Fluidics Manifold 19806-056 Constant Head Height Regulator 19806-058 Kit, Fittings & Tubing 19806-059 T-CALplus Calibration Tube Assembly (Blue Tube)- 19806-062 Cleaning Tube Assembly (Black Tube) 19806-072 Kit, Bubble trap cover Replacement (comes with O-ring) 19806-078 Kit, Beam dump Replacement (comes with O-ring), for PTV 19806-078 Kit, Beam dump Replacement (comes with O-ring), for PTV 19806-078 Kit, Chroin fitting 19806-079 Kit, Drain fitting 19806-080 Kit, Drain cover 19806-081 Mounting Cleat, for PTV 1000, PTV 2000 19806-082 Kit, Flow body assembly, with Flow Meter 19806-083 Kit, Flow body assembly, without Flow Meter 19806-084 Kit, Illuminator Lens Sub Assembly 19806-085 Kit, Installation Connectors 19806-086 Rotometer, 25 to 100 mL/min 19806-087 Panel, Instrument and Sample Management 19806-088 Brass mounting cup assembly 19806-106 Dry Verification STD, High Range (> 10 NTU) 19806-110 Dry Verification STD, Low Range (< 10 NTU) 19806-111 Fuse, 1.6A, 250VAC 19806-206 Illuminator O-ring 19806-407 O-ring, for Beam Dump 19806-407 O-ring, for Beam Dump 19806-407 O-ring, Rear Drain cover 19806-436 Lanyard Strap 19806-448 Fitting, Quick Connect, Male 19806-487 Valve; 1/4" Tubing Quick Connect 19806-487 Valve; 1/4" Tubing Quick Connect 19806-494 Tablet Wall Mount 19806-497
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Strain Relief, 3/8" NPT 19806-527
Tubing, 3/8" ID x 1/2" OD x 1/16" Wall, Clear PVC 19806-531
Seal, Bubble trap cover, -241 - 19806-554
Insert, Measurement Module Holder, Instrument Panel 19806-570
Measurement Module, PTV 2000 RL 19806-704
Measurement Module, PTV 2000 RL, with Bluetooth® 19806-705
Pad, Application, Microfiber, w/pocket 19806-803
Rinse bottle, 500 ml 420056
T-CAL <i>plus</i> ® -Standard, 0.30 NTU, Standard for Verification 48010035
T-CAL <i>plus®</i> -Standard, 1.00 NTU, Standard for Verification 48010135
T-CAL <i>plus</i> ® -Standard, 5.00 NTU, Standard for Calibration 48010235

Title	Part Number	
T-CAL plus® -Standard, 20 NTU, Standard for Calibration	48010335	
T-CAL®-Standard, 0,30 NTU, 500 ml	48011050	
T-CAL®-Standard, 1,00 NTU, 500 ml	48011150	
T-CAL®-Standard, 5,00 NTU, 500 ml	48012250	
T-CAL®-Standard, 20,00 NTU, 500 ml	48012350	
Cleaning Solution	54010435	
Detergent Solution	54011010	
Scale Remover	54013003	

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