



HF scientific MTOL+ Online Turbidimeters

- Automatic ultrasonic self-cleaning measuring chamber
- Integral data logger and USB port
- Meets EPA Method 180.1 requirements

The MTOL+ turbidimeter represents the best value on the market. Like its predecessor, the MicroTOL series, this turbidimeter is easy to use and needs very little maintenance. It features a compact, all-in-one design with integral display, so you don't have to purchase or mount a separate controller. Simple wall mounting and factory calibration get you up and running quickly.

Calibration takes less than five minutes using reusable primary calibration standards (sold separately below). Simply place the cuvette into the measuring chamber and verify the reading—just like a laboratory meter! Calibrate at least once every three months to meet EPA requirements. The sample chamber is only 25 mL to reduce calibration costs. Desiccant and internal heating systems control the measuring environment, eliminating condensation to give you worry-free, reliable readings.

A patented autoclean system keeps the optical glass cuvette chamber clean by sending an ultrasonic frequency through a unique device bonded to the bottom of the cuvette. This convenient feature keeps the glass from staining and lengthens the time between necessary manual cleaning and maintenance. To make periodic maintenance easier, order the **MTOL+ tubing replacement kit** (stock # 41394), which contains a shutoff clamp, backpressure valve and 5/16"-OD black tubes with fittings for the meter's flow-through assembly.

Meter includes: desiccant pouch, auto-cleaning optical glass cuvette, field power supply box with interconnecting cable, backpressure valve, inlet pressure regulator, and USB memory drive with range files. Inlet/outlet tubing and primary calibration standards are required but not included; order separately below right.

For a complete system, order a turbidimeter, inlet/outlet tubing and primary calibration standards.



Ultrasonic autoclean system keeps the optical glass cuvette chamber clean.



Compact, all-in-one design — no need for a separate controller!

Range:	0 to 100 NTU/FNU (factory calibration); can be field calibrated for 0 to 10 or 0 to 1000
Accuracy:	±2% of reading or ±0.02<40 NTU (whichever is greater); ±5% of reading >40 NTU
Resolution:	0.0001>10 NTU
Light source:	white light (krypton gas filled) lamp, replaceable
Display:	integral multiline backlit LCD
Data storage:	16 GB, downloadable via USB memory drive to .csv file
Outputs	
Analog:	4-20 mA (can operate concurrently with communications)
Relays:	(2) SPDT, programmable for hi/low/error alarms (with delay); rated 2A @ 120 VAC
Communication:	RS-485 Modbus RTU, and USB port for file data transfer & software upgrades
Power:	100-240 VAC, 47-63 Hz
Operating conditions:	34 to 122°F
Flow rate:	0.026 to 0.40 gal/min (100 mL/min to 1.5 L/min)
Inlet water pressure:	max 101.5 psi (integral pressure regulator)
Housing:	ABS plastic, indoor flat-surface mount
Dimensions:	approximately 9"W x 15.5"H x 8"D
Approvals:	EPA 180.1, CE

MFR #	DESCRIPTION	STOCK #	EACH
28053	MTOL+ Online Turbidimeter with Autoclean and Datalogger	41256	\$

ACCESSORIES

39953	ProCal™ Primary Calibration Kit (Factory Range) 0.02, 10, 100 NTU	41245	\$
39950	ProCal Primary Calibration Kit, 0.02, 1.0, 10 NTU	41309	
39957	ProCal Primary Calibration Kit, 0.02, 10, 1000 NTU	41285	
—	Black Polyethylene Inlet/Outlet Tubing, 1/4"OD x 0.17"ID, 50' Roll	17111	
—	Shielded Instrument Wire, 22/3 Gauge	42740	/ft
—	USB Memory Drive (Blank), 16 GB	67230	

REPLACEMENT ITEMS

21555R	Desiccant Pouch	41483	\$
24166S	Cuvette (for use with Ultrasonic Autoclean System)	41482	
24082S	Lamp Assembly, White Light	60295	
21062	MTOL+ Tubing Replacement Kit	41394	

Easily calibrate for your preferred range

The MTOL+ comes factory-calibrated for a range of 0 to 100 NTU, but you can easily set it for 0 to 10 NTU or 0 to 1000 NTU in the field. Simply use the included USB memory drive in the MTOL+ to load the range file that matches your process, purchase the proper ProCal primary standard set for that range, and calibrate.

