

MicroTOL Online Turbidimeter

Leading edge Microprocessor Technology combined with 30 years of optical measurement expertise has allowed HF scientific to become the leader in regulatory reporting turbidimeters. The HF **MicroTOL** OnLine Turbidimeter has been specifically designed to meet regulations of the EPA 180.1 and ISO 7027. Features include fast and easy calibration, verification in seconds, low maintenance, fail safe design which ensures the instrument is always reading accurately, bubble rejection system, optional autoclean ultrasonic cleaning system, and a data acquisition software system that allows logging and data storage for multiple turbidimeters.



*figure 2
Easy Calibration

Standard Features

• Fast and Easy Calibration

Verification in seconds while a complete primary calibration can be completed in less than 5 minutes. *(see figure 2)

• Low Volume Sample Chamber

Low volume sample chamber (30 ml) reduces calibration costs and provides quick response times.

• Low Maintenance Fail Safe Design

Simple Modular Design. Easy to Use & Service

• Bubble Rejection System

Eliminates bubbles without delaying the response time.

• Affordable

Modular microprocessor based technology ensures high quality at the industry's lowest price.

Optional Features

• AutoClean

Ultrasonic cleaning allows for the first EPA Accepted Automatic Cleaning OnLine Turbidimeter.

• OnLine Software

Allows logging, comparisons, graphs and data acquisition for multiple online turbidimeters into a PC.

• Remote Display

Allows remote monitoring up to 500 feet away.

Ordering Information

Cat. No.	MicroTOL Model	Range in NTU	Ultrasonic Autoclean	USEPA Method 180.1	ISO 7027
20053	#2 White Light	0 - 1000		X	
20054	#2 Infrared	0 - 1000			X
20055	#3 White Light	0 - 100	X	X	
20056	#3 Infrared	0 - 100	X		X
20063	#4 White Light	0 - 1000	X	X	
20064	#4 Infrared	0 - 1000	X		X

All units delivered fully calibrated and include 4-20ma, backlight display, RS-485/Modbus, inline pressure regulator, desiccant, universal power supply (100-240 VAC) and quick start guide.

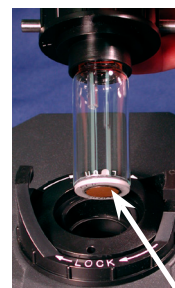
Accessories

19783	HF Online Windows™ Software for data collection & reporting
19609	Remote Display for an additional digital readout.
39953	<i>ProCal</i> Primary Calibration Kit, Low Range, 0.02 & 10 & 100 NTU for TOL 3
39957	<i>ProCal</i> Primary Calibration Kit, Full Range, 0.02, 10, & 1000 NTU
20779S	Power Cord - 120 VAC / 240 VAC

Specifications

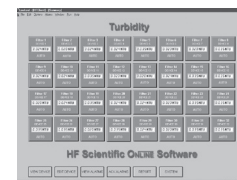
Range:	0 - 1000 NTU
Measurement Principle:	Nephelometry (90)
Accuracy:	2% of reading or ±0.02 Below 40 NTU (whichever is greater) 5% of reading above 40 NTU
Resolution:	0.0001 (below 10NTU) Selectable
Response Time:	Adjustable (5 to 500 seconds) 0 - 1000 NTU
Standard Outputs:	4-20 ma Galvanic Isolated or RS-485 (selectable)
RS-485 Protocols:	Modbus, HF Simplebus, HF Online Interface
User Alarms:	2 User Selectable high/low Alarms
Light Source:	White Light or Infrared (850nm LED)
Operating Temperature:	1°C - 50°C (34°F to 122°F)
Input Pressure:	1 - 200psi (built in regulator set at 15psi)
Enclosure:	Designed to meet Nema 4X, IP66
Display:	Multiline Custom Backlight LCD
Certifications:	USEPA, ISO 7027, CE Approved ETL Listed to UL 3111-1 and ETL Certified to CSA 22.2 No. 1010-1-92

Specifications subject to change without notice.



Ultrasonic Cleaning System

Keeps the optical chamber clean in finished or raw water applications.



HF Online software