

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# MTOL+™ Online Process Turbidimeter

Leading edge microprocessor technology combined with over 35 years of optical measurement expertise has allowed HF scientific to become the leader in regulatory reporting turbidimeters. The MTOL+ Online Process Turbidimeter has been specifically designed to meet regulations of EPA 180.1 and ISO 7027.

### Features

- **Fast and Easy Calibration**  
Primary calibration can be completed in less than 5 minutes.
- **Low Volume Sample Chamber**  
Reduces calibration costs and provides quick response times.
- **Long Lasting Light Source**  
Field replaceable if necessary.
- **Low Maintenance Design**  
Simple modular design. Easy to operate & service. No external controller needed.
- **Bubble Rejection System**  
Eliminates bubbles without delaying response time.
- **Value**  
High quality with many features.

### New Features

- Data logging and storage of 1 year's measurement and calibration data
- Variable user-selectable logging interval from 1 to 60 minutes
- Download data via USB flash drive
- Software updates via USB flash drive
- Isolated 4-20mA output standard
- 4-20mA and RS-485 Modbus outputs simultaneously
- Ultrasonic cleaning standard
- IP65 Sealing Rating



### Patented Ultrasonic Autoclean System

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

HF scientific product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact HF scientific Technical Service. HF scientific reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on HF scientific products previously or subsequently sold.

## Specifications

Range	0-10 NTU pre-calibrated
	0-100 NTU and 0-1000 NTU firmware files included on USB flash drive provided
Measurement Principle	Nephelometry (90°)
Accuracy	2% of reading or +/- 0.02 below 40 NTU (whichever is greater), 5% of reading above 40 NTU
Resolution	0.001 (below 10 NTU) User-Selectable
Response Time	Fast Response : Adjustable Averaging
Standard Outputs	4-20mA isolated and RS-485 Modbus
User Alarms	2 user-selectable high/low/system alarms C Form
Light Source	White Light (tungsten filament, krypton gas filled) or Infrared (860nm LED)
Operating Temperature	1°C-50°C (34°F - 122°F)
Input Pressure	1-101psi (7 bar) (built in regulator set at 15psi)
Display	Custom backlight LCD
Certifications	USEPA, ISO 7027, CE Approved
Power Input	100-240VAC, 47-63Hz

\*24VDC option available

**Specifications subject to change without notice.**

## Ordering Information

Cat. No.	Model	NTU Range	USEPA Method 180.1	ISO 7027
28028	White Light	0-100	x	
28027	Infrared	0-100		x

## Accessories

39953	ProCal EPA Approved Primary Calibration Kit 0.02, 10 & 100 NTU
21555R	Desiccant Refill
20779S	Power Cord 120 VAC / 240 VAC
24166S	Replacement Ultrasonic Cuvette Assembly
28157	Mounting Plate Kit, Easy Mount & Hardware



**A WATTS Brand**

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