

# TU5 Series Turbidimeters

## The next standard in the evolution of turbidity

Only the TU5 Series Lab & Process Turbidimeters with 360° x 90° Detection™ deliver unprecedented confidence that a change in your reading is a change in your water.



### Groundbreaking 360° x 90° Detection Technology

The TU5 Series employs a patented optical design that sees more of your sample than any other turbidimeter, delivering the best low level precision and sensitivity while minimizing variability from test to test.

### Matching lab and online results

For the first time you will be able to remove the uncertainty of which measurement to trust, thanks to identical 360° x 90° Detection Technology in both instruments.

### Everything about turbidity – faster

The TU5 Series dramatically reduces the time needed to get a turbidity measurement you can rely on, with 98% less online sample surface area to clean, sealed vials for calibration, and the elimination of the need for indexing and silicone oil in the lab. Not to mention, a smaller online sample volume means you will detect events almost immediately.

### No surprises

Prognosys™ monitors your TU5 Series online instrument, proactively alerting you to maintenance needs before your measurement becomes questionable. And a Hach Service Agreement protects your investment and helps ensure that you stay in compliance and on budget.

Learn More



## Technical Data\*

<b>Light Source</b>	Class 2 laser product, with embedded 650 nm (EPA 0.43 mW) or Class 1 laser product, with embedded 850 nm (ISO), max. 0.55 mW (complies with IEC/EN 60825-1 and to 21 CFR 1040.10 in accordance with Laser Notice No. 50)
<b>Range</b>	EPA: 0 - 700 NTU / FNU / TE/F / FTU 0 - 100 mg/L 0 - 175 EBC  ISO: 0 - 1000 NTU / FNU / TE/F / FTU 0 - 100 mg/L 0 - 250 EBC
<b>Accuracy</b>	±2% or 0.01 NTU from 0 - 40 NTU ±10% of reading from 40 - 1000 NTU based on Formazin primary standard
<b>Resolution</b>	0.0001 NTU / FNU / TE/F / FTU / EBC
<b>Repeatability</b>	Better than 1% of reading or ±0.002 NTU (TU5300sc) or ±0.0006 NTU (TU5400sc) on Formazin at 25 °C (77 °F), whichever is greater
<b>Stray Light</b>	<10 mNTU
<b>Units</b>	NTU, FNU, TE/F, FTU, EBC
<b>Signal Average Time</b>	TU5300sc: 30 - 90 seconds TU5400sc: 1 - 90 seconds
<b>Response Time</b>	TU5300sc: T90 <45 seconds at 100 mL/min TU5400sc: T90 <30 seconds at 100 mL/min
<b>Sample Temperature</b>	2 - 60 °C (35 - 140 °F)
<b>Sample Pressure</b>	6 bar (87 psi) maximum, compared to air at sample temperature range from 2 - 40 °C (35.6 - 104 °F)
<b>Sample Flow Rate</b>	100 - 1000 mL/min; optimal flow rate: 200 - 500 mL/min
<b>Operating Temperature Range</b>	0 - 50 °C (32 - 122 °F)
<b>Operating Humidity</b>	Relative humidity: 5 - 95% at different temperatures, non-condensing
<b>Storage Conditions</b>	-40 - 60 °C (-40 - 140 °F)
<b>Enclosure Rating</b>	Electronic compartment IP55; all other functional units IP65 with process head/ACM attached to the TU5300sc/ TU5400sc instrument
<b>Certifications</b>	CE compliant US FDA accession number: 1420493-000 EPA version, 1420492-000 ISO version Australian ACMA Marking
<b>Dimensions (H x W x D)</b>	249 x 268 x 190 mm (9.8 x 10.6 x 7.5 in.)
<b>Weight</b>	5.95 lbs. (2.7 kg); 11 lbs. (5.0 kg) with all accessories

\*Subject to change without notice.

## Order Information

### TU5300sc/TU5400sc Online Laser Turbidimeters

- LXV445.99.10112** TU5300sc Low Range Laser Turbidimeter, EPA Version  
**LXV445.99.10212** TU5400sc Ultra-High Precision Low Range Laser Turbidimeter, EPA Version  
**LXV445.99.53112** TU5300sc with Flow Sensor, Automatic Cleaning, RFID, and System Check, EPA Version  
**LXV445.99.53212** TU5400sc with Flow Sensor, Automatic Cleaning, RFID, and System Check, EPA Version

*Please note: Other turbidimeter configurations are available and RFID may not be available in all areas. Please visit [hach.com](http://hach.com) or contact your local Hach representative.*

*Please note: An SC controller is required for operation of the TU5300sc or TU5400sc, controllers are sold separately.*

### Calibration and Verification

- LZY835** Stabcal Primary Turbidity Standards Kit, 10/20/600 NTU, with RFID  
**LZY898** Stabcal Primary Turbidity Standards Kit without RFID (10 NTU, 20 NTU, 600 NTU)  
**LZY901** Glass Rod Secondary Turbidity Standard <0.1 NTU  
**LZY834** Replacement Vial for TU5300sc and TU5400sc

### TU5 Series Accessories

- LQV159.97.00002** Automatic Cleaning Module for TU5300sc and TU5400sc  
**LQV160.99.00002** Flow Sensor for TU5300sc and TU5400sc  
**LZY876** Desiccant Cartridge for TU5300sc and TU5400sc  
**LZY907.97.00002** Maintenance kit for TU5300sc and TU5400sc (incl. 20 NTU + 600 NTU vials and <0.1 NTU glass rod)  
**LZY903** Manual Vial Wiper for TU5200, TU5300sc, and TU5400sc

*Part numbers may vary by country.*

*See also Lab Instruments section for TU5 Series Laboratory Turbidimeters.*