



## **TU5300sc Low Range Laser Turbidimeter with Flow Sensor, Automatic Cleaning, and RFID, EPA Version**

**Product #:** LXV445.99.52112  
**ZAR Price:** Contact Hach

### **The next standard in the evolution of turbidity**

The EPA approved TU5 Series platform employs a unique optical design that sees more of your sample than any other turbidimeter, delivering the best low level precision and sensitivity while minimising variability between measurements. For the first time you will be able to remove uncertainty of which measurement to trust between your lab and process instruments, thanks to identical 360° x 90° Detection Technology in any TU5 Series turbidimeter.

The TU5300sc Low Range Laser Turbidimeter dramatically reduces the time needed to get a turbidity measurement you can rely on. A stable laser light source eliminates the need for annual lamp replacements. The turbidimeter's measurement surface area has been reduced by 98%, allowing you to save time cleaning. An automatic cleaning module is available that keeps your instrument clean, reducing the amount of time spent cleaning the instrument ever further. All of this, along with the ability to measure to 2 mNTU, gives you the next standard in the evolution of turbidity.

Only the new 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 unique 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.

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## **Specifications**

**Accuracy:** ±2% or 0.01 NTU from 0 - 40 NTU  
±10% of reading from 40 - 1000 NTU based on Formazin primary standard

Cable Length:	1.6 m, extendable up to 50 m for instrument without accessories
Calibration Method:	For Formazin and Stablcal:  20 NTU from 0 - 40 NTU; at 20 FNU and 600 NTU for full range  Custom calibration for up to 6-point calibrations
Certifications:	CE compliant  US FDA accession number: 1420493-000 EPA version, 1420492-000 ISO version  Australian ACMA Marking
Communication:	RFID
Controller:	Sensor Only
Dimensions (H x W x D):	249 mm x 268 mm x 190 mm
Enclosure rating:	Electronic compartment IP55; all other functional units IP65 with process head/ACM attached to the TU5300sc/TU5400sc instrument
Fitting:	Sample quick connector: ¼-in. for ¼-in. tubing
Instrument:	With Flow Sensor and Automatic Cleaning Module
Light source:	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)
Lower Limit of Detection (LOD):	0.002 NTU
Material:	ASA Luran S 777K / RAL7000, TPE RESIN Elastocon STK40,  Thermoplastic Elastomer TPS-SEBS
Model:	TU5300sc
Mounting Configurations:	Wall Mount
Operating Humidity:	Relative humidity: 5 - 95% at different temperatures, non-condensing
Operating temperature range:	0 - 50 °C
Options:	Process Head, Flow Sensor, & Automatic Cleaning Module
Power requirements (Voltage):	None
Range:	EPA:  0 - 700 NTU / FNU / TE/F / FTU  0 - 175 EBC
Regulatory:	EPA
Repeatability:	Better than 1% of reading or ±0.002 NTU on Formazin at 25 °C (77 °F), whichever is greater
Resolution:	0.0001 NTU / FNU / TE/F / FTU / EBC
Response time:	TU5300sc: T90 <45 seconds at 100 mL/min  TU5400sc: T90 <30 seconds at 100 mL/min
Sample Flow Rate:	100 - 1000 mL/min; optimal flow rate: 200 - 500 mL/min
Sample Pressure:	6 bar maximum, compared to air at sample temperature range from 2 - 40 °C
Sample Temperature:	2 - 60 °C
Signal Average Time:	TU5300sc: 30 - 90 seconds  TU5400sc: 1 - 90 seconds
Storage conditions:	-40 - 60 °C
Stray Light:	<10 mNTU

System Check:	No
Units:	NTU, FNU, TE/F, FTU, EBC
Verification:	Liquid: Stablcal, Formazin (0.1 - 40 NTU)  Dry: Glass Rod at <0.1 NTU
Warranty:	12 months
Weight:	2.7 kg (5.0 kg with all accessories)
What's included?:	TU5300sc Turbidimeter, Automatic Cleaning Unit, User Manual, Wall Mount, Vial Replacement Tool, Screw Set, Drying Cartridge, Flow Regulator, Service Bracket, Flow Sensor

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TU5300sc Turbidimeter, Automatic Cleaning Unit, User Manual, Wall Mount, Vial Replacement Tool, Screw Set, Drying Cartridge, Flow Regulator, Service Bracket, Flow Sensor

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## Required Accessories

- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, US plug (Item LXV525.99E11551)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)