



# TU5400sc Ultra-High Precision Low Range Laser Turbidimeter with Automatic Cleaning, System Check, and RFID, ISO Version

Product #:

AED Price:

LXV445.99.33222

Contact Hach

### The next standard in the evolution of turbidity

The ISO compliant 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 TU5400sc Ultra-High Precision 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 0.2 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 minimising 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.

| Specifications      |  |
|---------------------|--|
| Accuracy:           | $\pm 2\%$ of reading plus 0.01 NTU from 0 - 40 NTU                                 |
| Cable length:       | 1.6 m (5.25 ft), extendable up to 50 m (164 ft) for instrument without accessories |
| Calibration method: | For Formazin and Stablcal:   |

|                                       | 20 NTU from 0 to 40 NTU; at 20 FNU and 600 NTU for full range  |
|---------------------------------------|--|
| Certifications:                       | Custom calibration for up to 6-point calibrations<br>CE compliant  |
|                                       | US FDA accession number: 1420493-000 EPA version, 1420492-000 ISO version  |
|                                       | Australian ACMA Marking  |
| Communication:                        | System Check and RFID  |
| Controller:                           | Sensor Only  |
| Detection limit:                      | 0.0001 FNU   |
| Dimensions (H $\times$ W $\times$ D): | 249 mm x 268 mm x 190 mm   |
| Enclosure waterproof 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   |
| Flow rate:                            | 100 - 1000 mL/min; optimal flow rate: 200 - 500 mL/min   |
| Instrument:                           | With 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) |
| Material:                             | ASA Luran S 777K / RAL7000, TPE RESIN Elastocon STK40,   |
|                                       | Thermoplastic Elastomer TPS-SEBS   |
| Measuring range:                      | ISO:   |
|                                       | 0 - 1000 NTU / FNU / TE/F / FTU  |
|                                       | 0 - 250 EBC  |
| Model:                                | TU5400sc   |
| Mounting configurations:              | Wall Mount   |
| Operating humidity:                   | Relative humidity: 5 - 95% at different temperatures, non-condensing   |
| Operating temperature range:          | 0 - 50 °C  |
| Options:                              | Process Head & Automatic Cleaning Module   |
| Power requirements (Voltage):         | None   |
| Regulatory:                           | ISO  |
| Repeatability:                        | Better than 1% of reading or $\pm 0.0006$ 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 pressure:                      | 6 bar maximum, compared to air at sample temperature range from 2 - 40 $^{\circ}\mathrm{C}$  |
| Sample temperature:                   | 2 - 60 °C  |
| Signal average time:                  | TU5300sc: 30 - 90 seconds  |
|                                       | TU5400sc: 1 - 90 seconds   |
| Storage conditions:                   | -40 to 60 °C   |
| Stray light:                          | <10 mNTU   |
| System Check:                         | Yes  |
| Units:                                | NTU, FNU, TE/F, FTU, EBC   |

| Verification:     | Liquid: Stablcal, Formazin (0.1 to 40 NTU)  |
|-------------------|---|
|                   | Dry: Glass Rod at <0.1 NTU  |
| Warranty:         | 24 months   |
| Weight:           | 2.7 kg (5.0 kg with all accessories)  |
| What's included?: | TU5400sc Turbidimeter, Automatic Cleaning Unit, User Manual, Wall Mount, Vial Replacement<br>Tool, Screw Set, Drying Cartridge, Flow Regulator, Service Bracket |

## What's included?

TU5400sc Turbidimeter, Automatic Cleaning Unit, User Manual, Wall Mount, Vial Replacement Tool, Screw Set, Drying Cartridge, Flow Regulator, Service Bracket