

## Compact Turbimeter



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Turbidity and Total Suspended Solids (TSS) are two of the most important indicator parameters for drinking water quality, natural/surface water and wastewater treatment. The Compact Turbimeter uses unique QuadroptiX™ technology to provide:

- Maximum reliability and accuracy in the field
- Variety of operating/reading modes including Total Suspended Solids
- Full data log including time, date, Operator ID, Sample ID and calibration record for GLP compliance.



Operating according to the ISO 7027 standard, the Compact Turbimeter is ideal for the following applications:

**Drinking Water** - with a high sensitivity and high resolution of 0.01 NTU in the 0 – 1 NTU range, the Compact Turbimeter provides superb validation of drinking water quality and provides an essential tool for process control and management of drinking water production.

**Natural/Surface Waters** - with a wide dynamic range from 0 – 1050 NTU the Compact Turbimeter provides robust and reliable measurement of surface water turbidity and suspended solids for environmental studies.

**Wastewater** – utilising compensated turbidity measurement to give maximum resolution in wastewater and true ISO 7027 compliance, the Compact Turbimeter offers a Total Suspended Solids calibration option and continuous measurement mode for settling samples.

Regardless of the sample matrix the Compact Turbimeter guarantees ergonomic and accurate field measurement for turbidity and Total Suspended Solids.

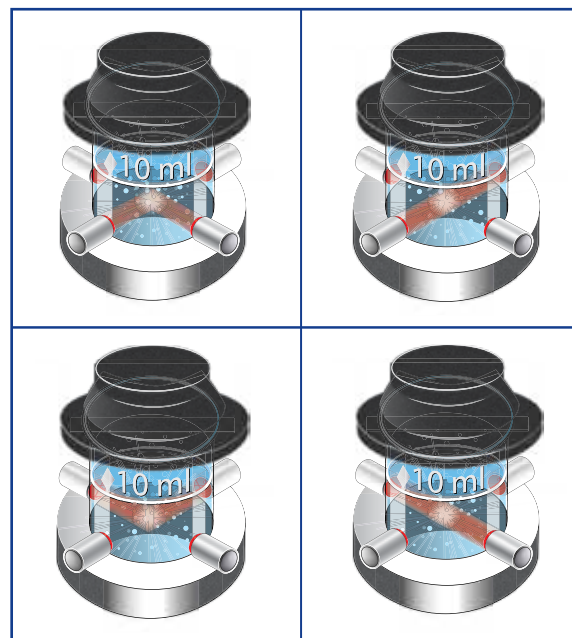


# QuadoptiX™ Technology

The QuadoptiX bench is effectively four independent turbidity measurement systems (two compensated nephelometric, two absorption) to guarantee:

- Greater accuracy, especially for samples containing mobile/settling solids or very low turbidity values
- Greater reliability due to the 'dual validation' approach of comparing two channels for each measurement

Sources in the QuadoptiX bench are high intensity LEDs at 860nm, automatically compensated for temperature to ensure long term stability of calibration.



## Turbidity Measurement Modes

Every Compact Turbimeter can be optimised for the specific sample requirements by using the following methods:

- Normal - the standard mode requiring a single button push and providing a results in around 12 seconds
- Average - Short, medium or long capture phases for extended measurement
- Continuous Capture - especially useful for cell indexing or settlement studies
- Rapid - using a shortened read time for qualitative evaluation.

Data from all modes is stored within the on-board log for future manipulation and recall.

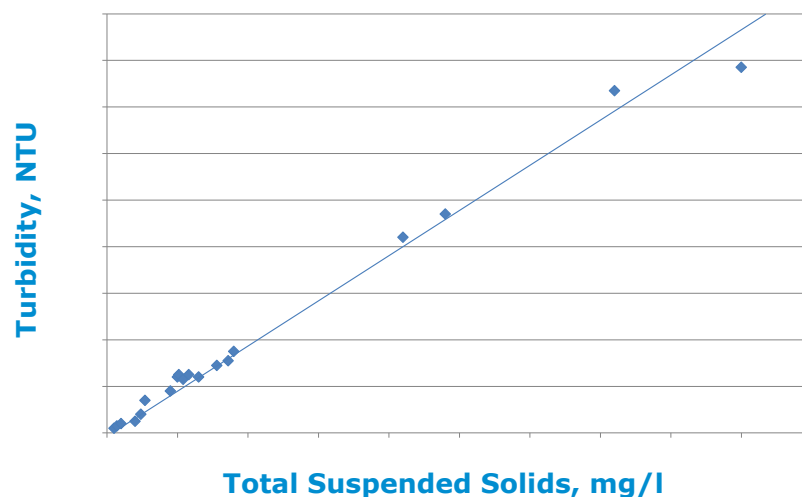


# Suspended Solids



## Suspended Solids (TSS)

The use of turbidity as an indicator of Total Suspended Solids is well established and utilised widely in surface water, wastewater and environmental monitoring.



The Compact Turbimeter allows the insertion of a site specific relationship between the two parameters, either as a factor or from correlated data, and subsequent use of the calibration for measurement of Total Suspended Solids (TSS).

## User Interface

Using the Compact Turbimeter is a simple and intuitive – switch on the instrument and the large backlit LCD screen displays a single selection menu:

- Readings – either turbidity (several modes) or Total Suspended Solids mode can be selected
- Calibration – using either SDVB standards (supplied), Formazin or Total Suspended Solids methods
- System – set Operator ID, sample ID, language, time/date plus interrogate the result and calibration logs.



# Instrument Specification

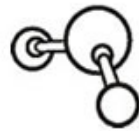


Model Number	CT12 Compact Turbimeter
Ingress Protection	IP 67
Weight	340g (inc batteries)
Dimensions (H x W x L)	50 x 82 x 225mm
Temp/Humidity Limit	0 - 50°C, 90%
User Interface	Backlit LCD screen, four soft keys, power button
Power	2 'AA' batteries, 5000 readings average, power indication and auto-off
Optical System	QuadoptiX™ system, 860nm LED source
Reading Modes	Normal, Average (Short, Medium, Long), Continuous Capture, Rapid, Total Suspended Solids (TSS)
Result Units	NTU, FTU, FNU, mg/l (TSS)
Range	0 - 1050 NTU
Accuracy	2% of reading
Resolution	0.01 NTU up to 9.99 NTU, 0.1 NTU up to 99.9 NTU, 1 NTU above 100 NTU
Repeatability	1%
Cuvette Diameter	25mm
Turbidity Calibration	Four point using SDVB standards (provided) or Formazin
TSS Calibration	Direct factor entry (up to 12) or correlation
Operator ID	Alphanumeric, up to 12
Sample ID	Alphanumeric, up to 12
Languages	English, French, Spanish, German, Italian
Result Log	100 data points including time, date, Operator ID, Sample ID, measurement mode
Calibration Log	Last 12 good calibrations including time, date, operator ID

## Ordering Information

PTH 090	Compact Turbimeter kit with Compact Turbimeter instrument (CT12 model) featuring QuadoptiX™ technology including four sample cuvettes, four SDVB calibration standards, two packs of lint free cloths, dilution tube, silicone oil and cleaning brush in a robust hard case.
PTC 090	Replacement SDVB calibration standard set for Compact Turbimeter supplied in a hard case with validation certificate.
PT 120	Silicone Oil, 25ml
PT 121	4000 NTU Formazin stock solution
PT 555	Replacement sample vials (pack of 5)

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**camlab**

24 Norman Way Industrial Estate, Over, Cambridge, CB24 5WE

Tel: +44(0)1954 233 100

Fax: +44(0)1954 233 101

Email: [sales@camlab.co.uk](mailto:sales@camlab.co.uk)

Web: [www.camlab.co.uk](http://www.camlab.co.uk)

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