

TURBIDI.T™

Specs and Features



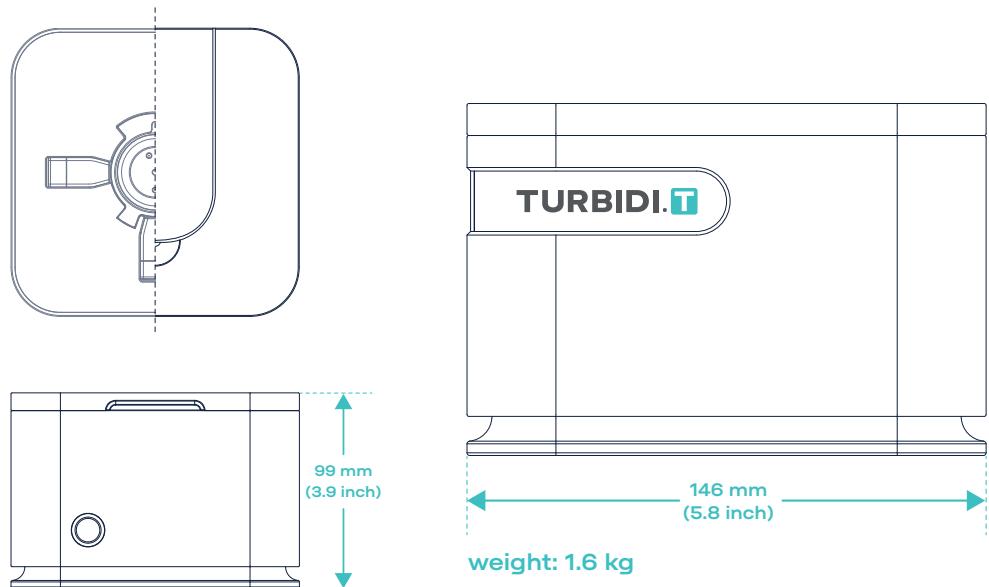
The TURBIDI.T™ represents the latest advancement in turbidity measurement, delivering a fully customizable, adaptable, scalable, connectable, actionable, and data-driven turbidimeter. By using interchangeable cartridges at different wavelengths, this device enables easy and precise turbidity measurement at various scales.

As a part of our CASCAD.S™ instrument series, the TURBIDI.T™ is compatible with an extensive selection of interchangeable optical cartridges depending on the requirements of your specific application.

Our Soft Matter Analytics™ App runs the TURBIDI.T™, capturing real-time turbidity changes in a solution and building custom, actionable databases.

Specification sheet TURBIDI.T™

Range turbidimetry	0 FTU to 7500 FTU
Light Source / Light Detector	Laser / Si PhotoDiode
Wavelengths	Emission cartridges: 850 nm, 635 nm, 520 nm and 405 nm (cartridge can be changed)
Measuring mode	Kinetics over time or single point measurement.
Sample volume range	Vials: 2, 4 or 10 mL, Cuvette: 4.5 mL, PCR-Tube: 200 µL.
Custom time steps between measurements	7 seconds to 60 minutes
Custom total measurement time	10 seconds to 240 hours
Environment	15°C to 30°C; max 95% RH non-condensing
Power Supply	100-240 VAC ($\pm 10\%$), 50 – 60 Hz, 1.5 A max
Dimensions	146 mm x 146 mm x 94 mm (W x D x H)
Weight	~1.6 Kg (depends on configuration)
10.5" Windows tablet with protective cover	245 mm x 175 mm x 8 mm
Operating software	Soft Matter Analytics™ software



Dimensions of a single TURBIDI.T™ unit

TURBIDI.T™ accuracy & variability

Laser Wavelength : 405nm				
	0-20 FTU Range		20-7500 FTU Range	
	Accuracy (FTU)	Repeatability (σ) (FTU)	Accuracy	Repeatability σ/μ
1ml	0.8	1.0	3%	1%
4ml	0.7	0.8	2%	1%
10ml	0.2	0.2	2%	1%
Laser Wavelength : 520nm				
	0-20 FTU Range		20-7500 FTU Range	
	Accuracy (FTU)	Repeatability (σ) (FTU)	Accuracy	Repeatability σ/μ
1ml	3.0	1.3	6%	2%
4ml	1.0	0.7	2%	2%
10ml	0.5	0.2	1%	2%
Laser Wavelength : 635nm				
	0-20 FTU Range		20-7500 FTU Range	
	Accuracy (FTU)	Repeatability (σ) (FTU)	Accuracy	Repeatability σ/μ
1ml	1.0	1.5	2%	1%
4ml	0.5	0.5	1%	1%
10ml	0.1	0.3	1%	1%
Laser Wavelength : 850nm				
	0-20 FTU Range		20-7500 FTU Range	
	Accuracy (FTU)	Repeatability (σ) (FTU)	Accuracy	Repeatability σ/μ
1ml	1.5	4.0	1%	3%
4ml	1.5	1.0	1%	2%
10ml	1.0	0.5	1%	2%

MODULAR

Leverage the TURBIDI.T's high modularity to build a turbidimeter that precisely aligns with your requirements.

- Choose the appropriate emitter or receiver optical cartridge that suits your particular application needs;
- Easily install and remove interchangeable emission and reception optical cartridges with specific wavelengths;
- Order new optical cartridges as your applications evolve over time;
- Select the sample holder that best suits your specific application: 2, 4 or 10 mL vials, cuvette, or PCR-tube;
- Position your TURBIDI.T™ under a flow hood and operate it remotely by leveraging the tablet's wireless communication capabilities;
- Take advantage of the Soft Matter Analytics App's exceptional data acquisition and processing capabilities.



SCALABLE

At any given time, you can seamlessly pair new TURBIDI.T™ instruments with your current units to expand your testing systems and augment your capabilities.

- The advantages of the Internet of Things (IoT) enables you to remotely operate up to five (05) TURBIDI.T™ units via wireless communication from a single tablet.
- You can effortlessly expand your system as your requirements change or to address a challenging and high-volume workload.



ACTIONABLE

You can effortlessly enhance your system at any point with supplementary optical cartridges that match to your current and forthcoming applications.

Versatility for CapEx Savings

- You no longer need to buy a new turbidimeter if your needs change. You can simply request new cartridges to meet new applications and demands.

Interchangeable cartridges

- As your requirements and applications evolve, you can easily change the type and wavelength of your TURBIDI.T's optical cartridges.



CARTRIDGES

Connect to the TURBIDI.T™ the emission or reception optical cartridge that aligns with your particular applications and industry requirements. Save by opting for new cartridges instead of new instruments.

- Selectable wavelengths
- Application specific cartridges
- Build your own extensible set of cartridges and scale as you grow
- CapEx savings: save by investing in new cartridges rather than instruments.



Contact us today to start your Data-driven Science journey

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