# Lovibond<sup>®</sup> Water Testing Tintometer<sup>®</sup> Group



# TB350 IR

Laboratory accuracy meets portability



## Ideal for field and environmental testing

Both in the laboratory and on site when analysing the quality of water in drinking or waste water: The TB350 turbidity meter delivers the most reliable measurements for low range to high range samples without sacrificing accuracy, compliant with applicable standards of ISO & US EPA. Featuring the new sensor technology Multipath 90° BLAC, the optical system is engineered with dual detectors to deliver a ratio reading which mitigates common measurement stability issues.

## BLAC®: The darker the better

Our experts solved two fundamental problems in turbidity measuring in a patented and unprecedented way.

The sophisticated arrangement of the two detectors allows the analysis of low and high turbidity samples with unsurpassed accuracy over the complete measuring range up to 4,000 NTU.

The angle of detection stays at 90° over the entire range. This ensures consistent results at any time, regard-less of the size and shape of the turbidity-causing particles.

The new  $\underline{BLAC^{\circledast} \text{ technology}}$  stands for: **B**ackscattered Light Absorbing Cavity.

The trap (BLAC<sup>®</sup>) eliminates stray light perfectly and provides extremely accurate results for low turbidity down to 0.01 NTU.

## Touchscreen interface & function application

The intuitive full-coloured touchscreen interface makes it easy to perform procedures and interpret results. With function applications, you can navigate between settings and performing that function efficiently. This user interface eliminates common frustrations and errors found with competitive products and guarantees outstanding operating convenience with animated procedures. There are 3 reading modes: single, signal averaging, fast-settling.

Multipath 90° BLAC <sup>®</sup> with innovative stray-
light elimination
 Highest accuracy over the complete range
including fast settling mode
 Measuring range: 0.01 – 4,000 NTU
 ISO 7027 compliant

Part Number: 194300

# Data logging & USB

The data logging capabilities allow you to record the testing location, operator's identification, time and date along with the measurement. Stored data can be transferred to a computer via USB.

# Competence in Turbidity

At Lovibond<sup>®</sup>, we look out for the little things that make a big difference. On the surface, turbidity analysis is a simple measurement. However, there are many factors that can affect the accuracy of readings or the dependability of an instrument. We obsess about turbidity measurement so you don't have to. Our team of globally recognised turbidity experts work to anticipate and solve operators' struggles with turbidity measurement.

## Industry

Chemical Industry | Food and Beverage Industry | Municipalities

#### Application

Drinking Water Treatment | Pool Water Control | Waste Water Treatment

## TB350 IR

Ideal for field and environmental testing, the TB350 turbidity meter delivers the most reliable measurements for low range to high range samples with unreached accuracy over the complete range. Its new Multipath 90° BLAC<sup>®</sup> sensor technology makes it the best instrument on the market. Get lab accuracy as portable solution.

Supplied with sample cells, silicone oil and ready-to-use  $T\text{-}CAL^{\circledast}$  calibration standards in carrying case.

#### Measuring Range

Test Name	Measuring Range
Turbidity	0.01 - 4000 NTU

#### **Technical Data**

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Model	Model WM-040-1004 (IR)
Light Source	IR LED (860 nm)
Regulatory Compli- ance	ISO 7027
Measuring Principle	Nephelometric (Multipath 90° BLAC)
Measuring Range	0.01 - 4000 NTU (FNU)
Resolution	Auto ranging: 0.01-9.99: 0.01 NTU ; 10.0-99.9: 0.1 NTU ; 100-4000: 1 NTU
Accuracy	± 1.8 % of reading + straylight
Repeatability	< 1 % or ± 0.01 NTU
Stray Light	< 0.014 NTU
Display Units	NTU, FNU, Degrees, mg/L Kaolin, mg/L PSL
Response Time	7 seconds
Reading Modes	Single, Signal Averaging, Fast-Settling
Calibration Options	Full-range calibration from 0 - 4000 NTU
Detector	Silicon Photodiode
Ratio Mode	Yes
Sample Required	10 mL (0.4 oz)
Display	Full-Colour Touchscreen
Display Size	55 x 95 mm (W x H)
Interfaces	USB-A USB-C
Data Logger	250 measurements, all calibrations, verifications and factory-restore actions
Data Transfer Format	.CSV
Power Save Mode	Yes
Auto – OFF	Selectable
Power Supply	4 batteries (AA) 3 NiMH-battery pack (AA) Universal (90 - 240 VAC), via external power supply
Environmental Con- ditions	Temperature: 0 - 50 °C (32 - 122 °F) Humidity: 0 - 90 % at 30 °C, noncondensing Humidity: 0 - 80 % at 40 °C, noncondensing Humidity: 0 - 70 % at 60 °C, noncondensing
Protection Class	IP 67 (Instrument)
Compliance	CE CSA FCC A RoHS TÜV UL WEE
Languages User In- terface	German, English, French, Spanish, Portuguese, Chinese, Japanese, Dutch, Turkish, Polish

Languages Quick Start Guide	German, English, French, Spanish, Italian, Por- tuguese, Chinese, Dutch, Turkish, Russian
Languages Full User Manual	German, English, French, Spanish, Italian, Por- tuguese, Chinese, Dutch, Turkish, Russian
Dimensions	155 x 83 x 225 mm
Weight	804 g (898 g with four AA alkaline batteries)
Weight with Packag-	(898 g with four AA alkaline batteries)

Weight with Packa

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# **Delivery Scope**

—	TB350 IR in case
—	2 cuvettes with lids
—	1 Cleaning cloth for cuvettes
—	1 Cleaning brush
	Silicon oil, 15 mL
—	4 Batteries (AA)
—	1 T-CAL <sup>®</sup> -Standard, 5 NTU
—	1 T-CAL <sup>®</sup> -Standard, 20 NTU
—	1 T-CAL <sup>®</sup> -Standard, 800 NTU
_	1 T-CAL <sup>®</sup> -Standard, 4000 NTU
	1 Screw driver
	1 Quick Start Guide
	1 Test Certificate T-CAL <sup>®</sup>
_	1 Warranty information

#### Accessories

Title	Part Num- ber
Set turbidity standards T-CAL (5, 20, 800, 4000 NTU)	194154
Silicon oil	194295
Batteries (AA), set of 4	1950025
Cleaning cloth	197635
Sample cuvettes with black lid, Height 55 mm, ø 24 mm, set of 12	197655
Rechargeable battery pack, Ni-MH	19820-011
USB-C cable 1 m, USB-C to A	19820-081
Power supply TB series	19820-170
Brush, 11 cm length	380230
Cuvette stand for 6 round cuvettes Ø 24 mm	418951
T-CAL <sup>®</sup> -Standard, 4000 NTU, 125 ml	48012912
T-CAL <sup>®</sup> -Standard, 4000 NTU, 500 ml	48012950

#### Tintometer GmbH

Lovibond® Water Testing Schleefstraße 8-12 44287 Dortmund Tel.: +49 (0)231/94510-0 sales@lovibond.com www.lovibond.com Germany

#### **Tintometer Brazil**

Caixa Postal: 271 CEP: 13201-970 Jundiaí – SP Tel.: +55 (11) 3230-6410 sales@lovibond.us www.lovibond.com.br Brazil

### The Tintometer Limited

Lovibond House Sun Rise Way Amesbury, SP4 7GR Tel.: +44 (0)1980 664800 Fax: +44 (0)1980 625412 sales@lovibond.uk www.lovibond.com UK

Tintometer Inc. 6456 Parkland Drive Sarasota, FL 34243 Tel: 941.756.6410 Fax: 941.727.9654 sales@lovibond.us www.lovibond.us USA

#### **Tintometer China**

9F, SOHO II C. No.9 Guanghualu, Chaoyang District, Beijing, 100020 Customer Care China Tel.: 4009021628 Tel.: +86 10 85251111 Ext. 330 Fax: +86 10 85251001 chinaoffice@tintometer.com www.lovibond.com China

#### Tintometer India Pvt. Ltd.

Door No: 7-2-C-14, 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> Floor Sanathnagar Industrial Estate, Hyderabad, 500018 Telangana Tel: +91 (0) 40 23883300 Toll Free: 1 800 599 3891/ 3892 indiaoffice@lovibond.in www.lovibondwater.in India

#### Tintometer South East Asia

Unit B-3-12, BBT One Boulevard, Lebuh Nilam 2, Bandar Bukit Tinggi, Klang, 41200, Selangor D.E Tel.: +60 (0)3 3325 2285/6 Fax: +60 (0)3 3325 2287 lovibond.asia@tintometer.com www.lovibond.com Malaysia

#### **Tintometer Spain**

Postbox: 24047 08080 Barcelona Tel.: +34 661 606 770 sales@tintometer.es www.lovibond.com Spain

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