ROYLAB

TURBIDITY METERS

Benchtop Ratio Turbidimeter

Description

● Turbidimeter is an instrument used to measure the degree of scattering and attenuation of light generated by insoluble particulate matter suspended in water (or transparent liquid), and can quantitatively characterize the content of these suspended particulate matter.It is widely used in waterworks, food, chemical industry, power plant, metallurgy, environmental protection, beverage, wine making, pharmaceutical industry and other departments.And it is a commonly used laboratory instrument.

Features

● Adopting microcomputer technology,color LCD touch screen display, the operation is more intuitive and convenient.

● With average measurement function; 1000 sets of test data can be stored, and the data can be saved, printed, and uploaded.

● With time and date setting function, USB communication interface and U disk to read data, support to connect to PC for data upload.

● Adopting scattered-transmitted light measuring principle, ratio calibration.

● Automatic range switching, supporting multi-point calibration

Characteristics
● Measurement of light scatter and decay of the insoluble particles suspended in water or transparent liquids;
● Quantitative analysis of particle contents.

Specifications

Model	BEP-TB40A	BEP-TB20A	BEP-TB10A	BEP-TB5A	BEP-TB2A	BEP-TB1A
Light source				Tungsten halogen lamp 6V, 10W		
Receiving element				Silicon photocell		
Measurement range NTU	0.00~50.0; 50.1~200; 200.1~2000; 2000.1~4000 (automatic range switchover)	0.00~50.0; 50.1~200; 200.1~2000 (automatic range switchover)	0.00~50.0; 50.1~200; 200.1~1000 (automatic range switchover)	0.00~50.0; 50.1~200; 200.1~500 (automatic range switchover)	0.00~50.0; 50.1~200 (automatic range switchover)	0.00~50.0; 50.1~100 (automatic range switchover)
Readings display				LCD touch screen		
Minimum reading				0.001		
Allowable error of indication				≤±6%		
Zero Drift				≤±0.3%FS		
Stability of indication				≤±1%FS		
Repeatability				≤0.5%		
Sample bottle				Φ25mm×95mm		
Data storage				1000 sets		
Calibration modes	7	6	5	4	3	3
Sample volume				30~40mL		
Interface				USB/U disk		
Weight (Gross)				9 kg		
Overall dimensions				430mm×430mm×300mm		

Portable Turbidity Meter

BEP-TB20B   **BEP-TB10B**   **BEP-TB5B**   **BEP-TB2B**
BEP-TB1B   **BEP-TB50**   **BEP-TB20**

Accuracy: ≤±6%

Data storage: 2000 sets

Unit switches: NTU, FTU, EBC, ASBC

Measurement range NTU: 0.00-2000; 0.00-1000; 0.00-500; 0.00-200; 0.00-100; 0.00-50; 0.00~20.0
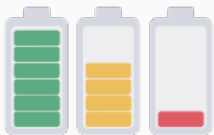
Features

- LCD, backlight can be set
- Novel appearance, convenient for user in field testing
- Automatic range switchover, supporting-zero-point and four-point calibration, in line with GLP Regulation
- Using four AA batteries, external power supply, automatic power off function

Specifications

Model	BEP-TB20B	BEP-TB10B	BEP-TB5B	BEP-TB2B
Light source	LED; 860nm (Wavelength)			
Unit switches	NTU, FTU, EBC, ASBC			
Measurement range NTU	0.00~20.0; 20.01~200; 200.1~2000	0.00~20.0; 20.01~200; 200.1~1000	0.00~20.0; 20.01~200; 200.1~500	0.00~20.0; 20.01~200
Readings display	LCD			
Minimum reading	0.001			
Allowable error of indication	≤±6%			
Zero Drift	≤±0.5%FS			
Stability of indication	≤±0.5%FS			
Repeatability	≤0.5%			
Sample bottle	Φ25mm×65mm			
Sample volume	20~25mL			
Interface	USB			
Data storage	2000 sets			
Calibration modes	7	6	5	4
Weight	0.5kg			
Overall dimensions	220mm×95mm×85mm			

Model	BEP-TB1B	BEP-TB50	BEP-TB20
Light source	LED; 860nm (Wavelength)		
Unit switches	NTU, FTU, EBC, ASBC		
Measurement range NTU	0.00~20.0; 20.01~100	0.00~20.0; 20.01~50	0.00~20.0
Readings display	LCD		
Minimum reading	0.001		
Allowable error of indication	≤±6%		
Zero Drift	≤±0.5%FS		
Stability of indication	≤±0.5%FS		
Repeatability	≤0.5%		
Sample bottle	Φ25mm×65mm		
Sample volume	20~25mL		
Interface	USB		
Data storage	2000 sets		
Calibration modes	4	3	2
Weight	0.5kg		
Overall dimensions	220mm×95mm×85mm		

Portable Turbidity Meter

RLIFT-BEP-TB100

Advantages

- High-performance portable turbidity meter meets the design criteria in ISO 7027
- 2 to 5 points calibration using the Formazin Standards

- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC
- Single measurement mode automatically senses and locks a stable reading
- Continuous measurement mode can be used for indexing or matching the sample vials

- Auto-Power Off effectively conserves battery life
- Setup menu allows to set the number of calibration points, resolution, date and time, etc.
- Reset function automatically resumes all settings back to the factory defaults
- Expanded memory stores or recalls up to 100 data sets
- USB communication interface for data transfer or connecting a power adapter to meter

Specifications

Model		RLIFT-BEP-TB100
Turbidity	Principle	ISO 7027 nephelometric method (90º)
	Range	0~1100NTU, 0~275 EBC, 0~9999ASBC
	Resolution	0.01 (0~99NTU), 0.1 (100~999NTU), 1 (1000~1100NTU)
	Accuracy	±2% of reading (0~500NTU),
		±3% of reading (501~1100NTU)
	Calibration Points	2 to 5 points
Other Specifications	Calibration Standards	0.02, 10, 200, 500, 1000NTU
	Light Source	Infrared-emitting diode (850nm wavelength)
	Detector	Silicon photo diode
	Stray Light	<0.02 NTU
	Sample Vial	60(H)× 25 (Dia)mm
	Sample Volume	30mL
	Memory	100 data sets
	Communication Interface	USB
	Operating Temperature	0-50℃
	Display	Custom LCD (60×40mm)
	Power Requirements	3×1.5V AA batteries or DC5V power adapter
	Dimensions	180 (L)× 85 (W)×70 (H)mm
	Weight	300g

Ordering Information

RLIFT-BEP-TB100: Meter, turbidity standards (0.02, 200, 500, 1000 NTU), sample vials, lint-free cloth and carrying case

Benchtop Turbidity Meter

BEP-TB200

Features

- 2 to 7 points calibration using the Formazin Standards
- Selectable 4 turbidity units, including the NTU, FNU, EBC and ASBC etc.
- Reset function automatically resumes all settings back to the factory defaults
- Expanded memory stores or recalls up to 200 data sets
- Turbidity, total suspended solids (TSS)
- TSS conversion factor ensures the accurate measurement of the total suspended solids
- Auto-Read function senses and locks a stable reading

- Setup menu allows to set the date and time, measurement mode, resolution,
- Password protection prevents the unauthorized calibration and settings
- USB communication interface is easy to transfer data to PC

Measurement Parameters
- Turbidity, total suspended solids (TSS)

Specifications

Model		BEP-TB200
Turbidity	Range	0~2000NTU, 0~500 EBC, 0~9999ASBC
	Resolution	0.01 (0~99NTU), 0.1 (100~999NTU), 1 (1000~2000NTU)
	Accuracy	±2% of reading (0~500NTU), ±3% of reading (501~2000NTU)
	Calibration Points	2to7 points
	Calibration Standards	0.02, 10, 200, 500, 1000, 1500, 2000NTU
TSS	Range	Depending on the TSS conversion factor
	Accuracy	3% of reading
Other Specifications	light Source	Infrared-emitting diode (850nm wavelength)
	Detector	Silicon photo diode
	Stray Light	<0.02 NTU
	tray Light	60(H)× 25 (Dia)mm
	Memory	200 data sets
	Communication Interface	USB
	Operating Temperature	0~50ºC
	Display	4.5 inches TFT LCD
	Power Requirements	DC12V power adapter
	Dimensions	250 (L)× 177 (W)×96(H)mm
	Weight	1.2kg

Ordering Information

BEP-TB200: Meter, turbidity standards (0.02, 200, 500, 1000 NTU), sample vials, lint-free cloth and power adapter

Benchtop Turbidity Meter

BEP-TB1000   BEP-TB200L

🖥 880nm LED Light Source.

🔄 Uses Nephelometric principle with 90º detection.

💡 Meets ISO 7027 and offers consistent light source for higher accuracy.

✅ Selectable turbidity units, including the NTU, FNU and EBC.

Description

- The desktop turbidimeter has a built-in microprocessor, advanced configuration, and powerful functions. It is a very precise turbidity measuring instrument. It is based on the infrared light source that passes through the optical lens and penetrates the sample liquid

- This benchtop turbidity meter can be used to measure the turbidity of raw or purified water on filtration devices in various places, such as drinking water, various production and industrial waters, and wherever qualified water is required.

Features

- 880nm LED Light Source.
- Uses Nephelometric principle with 90º detection.
- Meets ISO 7027 and offers consistent light source for higher accuracy.
- Selectable turbidity units, including the NTU, FNU and EBC.
- Settable parameters, including user ID, number of calibration points, data and time, etc.

Specifications

Model		BEP-TB1000	BEP-TB200L
Measuring Unit	Range	(0~20.00) NTU, (20.0~200.0) NTU (200~1000) NTU	(0~20.00) NTU, (20.0~200.0) NTU
	Accuracy	≤±6%	≤±8%
	Repeatability	≤0.5%	≤1.0%
	Fluctuation	≤±0.5%FS/30min	≤±1.0% FS/30min
General	Electricity	AC Adapter, 200-240 VAC input	AC Adapter, 200-240 VAC input
	Dimension (mm)& Weight(kg)	330×250×130, 2.5	330×250×130, 2.5

BEP-TB1000

- 1-7 points calibration using Formazin standards or zero water.
- Autoranging from 0-1000 NTUs.
- Data capacity of up to 2000 sets (GLP-compliant).
- Data stored can be transferred into the computer by USB or RS-232 communication interface.

BEP-TB200L

- 1-5 points calibration using Formazin standards or zero water.
- Autoranging from 0-200 NTUs.

Portable Turbidity Meter

BEP-TB1000P   BEP-TB200P

Features

- 850nm LED light Source.
- Uses Nephelometric principle with 90º detection.
- Meets ISO 7027 and offers consistent light source for higher accuracy.
- Selectable turbidity units, including the NTU, FNU and EBC.
- Settable parameters, including user ID, number of calibration points, data and time, etc.
- Auto-power-off feature effectively extends the battery usage time.
- IP65 waterproof.

Specifications

Model		BEP-TB1000P	BEP-TB200P
Measuring Unit	Range	(0~20.00) NTU, (20.0~200.0) NTU (200~1000) NTU	(0~20.00) NTU, (20.0~200.0) NTU
	Resolution	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU
	Accuracy	≤±6%	≤±8%
	Repeatability	≤0.5%	≤1.0%
General	Fluctuation	≤±0.5% FS/30min	≤±1.0% FS/30min
	Electricity	AA Battery, AC Adapter，200-240 VAC input，DC 5V output	
	Dimension (mm)& Weight (kg)	100×220×80,0.8	

BEP-TB1000P

- 1-7 points calibration using Formazin standards or zero water.
- Autoranging from 0-1000 NTUs.
- Data capacity of up to 2000 sets (GLP-compliant).
- Data stored can be transferred into the computer by USB or RS-232 communication interface.

BEP-TB200P

- 1-4 points calibration using Formazin standards or zero water.
- Autoranging from 0-200 NTUs.

- 850nm LED light Source.

- Uses Nephelometric principle with 90º detection.

- Meets ISO 7027 and offers consistent light source for higher accuracy.

- Auto-power-off feature effectively extends the battery usage time.

- IP65 waterproof.

Description

- The portable turbidimeter is based on the principle of infrared 90º scattered light measurement and uses a turbidity electrode with a special structure. The turbidity of the sample can be measured directly without sampling.

Benchtop Turbidity Meter

BEP-TB4000E

⬜ 7" colorful touchscreen

📁 Data storage capacity of 1000 sets (GLP-compliant).

💡 Tungsten lamp light source met USEPA 180.1 requirement.

🖥 Data stored can be transferred into the computer by USB or RS-232 communication interface.

Description

- The desktop turbidimeter has a built-in microprocessor, advanced configuration, and powerful functions. It is a very precise turbidity measuring instrument. It is based on the infrared light source that passes through the optical lens and penetrates the sample liquid

- This benchtop turbidity meter can be used to measure the turbidity of raw or purified water on filtration devices in various places, such as drinking water, various production and industrial waters, and wherever qualified water is required.

Features

- 7" colorful touchscreen.

- Tungsten lamp light source met USEPA 180.1 requirement.

- 1-8 points calibration using Formazin standards or zero water.

- Data storage capacity of 1000 sets (GLP-compliant).

- Autoranging from 0-4000 NTUs.

- Reset feature automatically resumes all settings back to factory default options.

- Data stored can be transferred into the computer by USB or RS-232 communication interface.

Specifications

Model		BEP-TB4000E
Measuring Unit	Range	(0.000~20.00) NTU, (20.01~200.0) NTU, (200~2000) NTU, (2001~4000) NTU
	Accuracy	≤±6%
	Repeatability	≤0.5%
	Fluctuation	≤±0.5% FS/30min
General	Electricity	AC Adapter，200-240 VAC input
	Dimension (mm)& Weight (kg)	358×323×160, 8