

MeterTo SGZ-200BS

SGZ-200BS Portable Digital Turbidity Tester User Manual

Model: SGZ-200BS | Brand: MeterTo

1. PRODUCT OVERVIEW

The SGZ-200BS Portable Digital Turbidity Tester is a precision instrument designed for measuring turbidity in various liquid samples. It operates by detecting and quantifying the scattering of light in water or solutions, adhering to the International Turbidity Measurement Standard ISO 7027. This device is compact, features an LED backlight display, and offers high accuracy and stability for reliable measurements.



Figure 1: SGZ-200BS Portable Digital Turbidity Tester. The image shows the compact, handheld device with a blue LED display, control buttons, and a rotary knob. A power cable is connected to the top right.

2. KEY CHARACTERISTICS

- **Compact Design:** Novel design with an LED backlight display for clear readings.

- **User-Friendly Operation:** Succinct operation with a suitable measurement range and high performance.
- **High Accuracy & Stability:** Low drift, high accuracy, and nice stability ensure long-term and stable operation.
- **Precise Measurement:** Unique positioning structure and high-precision optical system guarantee accurate and repeatable measuring values.
- **Power Efficiency:** Lower power consumption with both AC and DC power supply options, convenient for field or laboratory use.
- **Battery Indicator:** Features a low voltage indication function to remind users to replace batteries promptly.

3. APPLICATIONS

This instrument is widely applicable for turbidity measurement in various sectors, including but not limited to:

- Waterworks
- Life Sewage Treatment Plants
- Drink Factories
- Environmental Protection Departments
- Process Water Monitoring
- Brewage & Drugs Manufacturers
- Guard Departments
- Hospitals

4. SPECIFICATIONS

Parameter	Value
Measuring Principle	90° scattered light
Minimum Display (NTU)	0.1
Zero Drift	±1.5% (F.S 30min)
Display Value Stability	±1.5% (F.S 30min)
Repeatability	≤2%
Power Source	Battery Powered (AC & DC options)
Item Weight	3.31 Pounds
UPC	651721415439

5. SETUP GUIDE

1. **Unpacking:** Carefully remove the turbidity tester and all accessories from the packaging. Verify all components are present according to the packing list.
2. **Power Connection:** Connect the appropriate power adapter (AC) or ensure batteries are correctly installed for DC operation. The device supports both AC and DC power supply.
3. **Initial Inspection:** Inspect the device for any visible damage. Do not operate if damage is detected.
4. **Placement:** Place the instrument on a stable, level surface away from direct sunlight, strong vibrations, or extreme

temperatures.

6. OPERATING INSTRUCTIONS

- Power On:** Press the power button to turn on the device. The LED backlight display will illuminate.
- Calibration (if required):** Refer to the specific calibration procedure outlined in the full manual for accurate measurements. Typically involves using standard turbidity solutions.
- Sample Preparation:** Ensure your sample is representative and free of large particles or air bubbles that could interfere with readings.
- Measurement:** Insert the sample into the designated measurement cell. Close the lid to prevent external light interference. The device will display the turbidity reading in NTU.
- Reading Interpretation:** Note the displayed value. The minimum display is 0.1 NTU.
- Power Off:** After use, press the power button again to turn off the device.

7. MAINTENANCE

- Cleaning:** Regularly clean the exterior of the device with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Measurement Cell Care:** Keep the measurement cell clean and free of scratches. Use distilled water and a lint-free cloth for cleaning. Any residue or scratches can affect measurement accuracy.
- Storage:** Store the instrument in a dry, cool place, away from direct sunlight and extreme temperatures, when not in use.
- Battery Replacement:** If the low voltage indicator appears, replace the batteries promptly to ensure continued accurate operation.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on	No power, dead batteries, or faulty power adapter.	Check power connection. Replace batteries if using DC power. Ensure power adapter is functional.
Inaccurate readings	Dirty measurement cell, uncalibrated device, or air bubbles in sample.	Clean the measurement cell thoroughly. Perform calibration. Ensure sample is free of bubbles.
Display is dim or flickering	Low battery power.	Replace batteries or connect to AC power.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact MeterTo customer service. Keep your purchase receipt and product model number (SGZ-200BS) readily available when contacting support.

Please note that MeterTo mainly offers instruments and tools. Ensure the product is offered by our store MeterTo when purchasing to ensure quality and after-sale service.

This manual is for informational purposes only. Specifications are subject to change without notice.