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› [Mettler Toledo SG6-FK2 SevenGo Pro Range Portable Dissolved Oxygen Meter \(Field Kit Version\) with Electrode, 0.00 to 600 Percent Saturation](#)

Mettler Toledo SG6-FK2-51302562

Mettler Toledo SevenGo Pro Range Portable Dissolved Oxygen Meter

Model: SG6-FK2-51302562

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, setup, and maintenance of the Mettler Toledo SevenGo Pro Range Portable Dissolved Oxygen Meter (Field Kit Version), model SG6-FK2-51302562. This instrument is designed for precise determination of dissolved oxygen, pH, mV, conductivity, TDS (total dissolved solids), salinity, and specific resistance in various field applications. Please read this manual thoroughly before using the device.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury and damage to the instrument:

- Use the instrument only for its intended purpose as described in this manual.
- Do not operate the instrument in explosive environments or near flammable materials.
- Ensure proper handling of electrodes and calibration solutions. Some solutions may be hazardous.
- Protect the instrument from extreme temperatures, direct sunlight, and moisture.
- Only qualified personnel should perform repairs or maintenance not described in this manual.

3. PACKAGE CONTENTS

Upon opening the field kit, verify that all components are present and undamaged:

- SevenGo Pro Portable Meter Unit
- Dissolved Oxygen Electrode
- Carrying Case with custom foam inserts

- Operating Instructions Manual
- Calibration solutions and accessories (e.g., electrolyte, polishing strips, batteries)
- Cables for electrode connection



Figure 3.1: Contents of the Mettler Toledo SevenGo Pro Field Kit, including the meter, electrode, and various accessories within its protective carrying case.

4. SETUP

4.1. Battery Installation

The SevenGo Pro meter operates on standard batteries. Locate the battery compartment on the rear of the meter. Insert the batteries, ensuring correct polarity as indicated inside the compartment. Close the compartment securely.

4.2. Electrode Connection

Connect the dissolved oxygen electrode to the corresponding port on the SevenGo Pro meter. Ensure the connection is firm and secure to prevent signal interference. The meter is designed for use with the supplied Mettler Toledo electrode.



Figure 4.1: The SevenGo Pro meter with the dissolved oxygen electrode connected, ready for operation.

4.3. Initial Power-On

Press the power button to turn on the meter. The high-contrast display will illuminate, and the meter will perform a self-test. Ensure the display shows clear readings and no error messages before proceeding.

5. OPERATING INSTRUCTIONS

5.1. Basic Navigation

The meter features an intuitive button layout for navigation:

- **Cal:** Initiates the calibration process.
- **Read/Exit:** Starts a measurement or exits a menu.
- **Mode:** Switches between measurement parameters (DO, pH, mV, conductivity, etc.).
- **Up/Down Arrows:** Navigate through menu options or adjust values.

5.2. Calibration

Regular calibration ensures accurate measurements. The meter supports 3-point pH calibration with selection from 4 predefined and one user-defined buffer groups.

1. Prepare the required calibration solutions according to the electrode type and measurement parameter.
2. Press the **Cal** button to enter calibration mode.
3. Follow the on-screen prompts to immerse the electrode in the calibration solutions.
4. Wait for the meter to stabilize and confirm each calibration point.
5. Save the calibration data.

5.3. Taking Measurements

After successful calibration, the meter is ready for measurement:

1. Select the desired measurement parameter using the **Mode** button.
2. Immerse the electrode into the sample solution, ensuring the sensor is fully submerged and free of air bubbles.
3. Press the **Read** button to initiate the measurement.
4. Wait for the reading to stabilize on the display. The meter will indicate when the reading is stable.
5. Record the measurement if not using the data memory function.

5.4. Data Memory

The SevenGo Pro meter features a data memory for 99 GLP (Good Laboratory Practice) data records. Refer to the on-screen menu for options to save, recall, or delete data records. Each record typically includes the measurement value, time, and date.

6. MAINTENANCE

6.1. Cleaning the Meter

Wipe the meter's exterior with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure no liquid enters the ports or battery compartment.

6.2. Electrode Care

Proper electrode maintenance is crucial for accuracy and longevity:

- Rinse the electrode thoroughly with distilled or deionized water after each use.
- Store the dissolved oxygen electrode in its protective cap with the appropriate storage solution, as

specified by Mettler Toledo.

- Periodically check the electrode membrane for damage or fouling. Replace or clean as necessary according to the electrode's specific instructions.

6.3. Storage

When not in use for extended periods, store the meter and electrode in the provided carrying case in a dry, cool place, away from direct sunlight and extreme temperatures. Remove batteries if storing for very long durations to prevent leakage.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Meter does not power on.	Dead or incorrectly installed batteries.	Replace batteries or check polarity.
Unstable or inaccurate readings.	Electrode not calibrated, damaged, or fouled; air bubbles on sensor; incorrect sample temperature.	Perform calibration; clean/replace electrode; ensure no air bubbles; allow sample to reach stable temperature.
"Error" message on display.	System malfunction or calibration error.	Refer to the specific error code in the full operating manual or contact support.
No data saved.	Memory full or save function not properly executed.	Delete old records; ensure save procedure is followed.

8. SPECIFICATIONS

Parameter	Value
Model Number	SG6-FK2-51302562
Measurement Parameters	pH, mV, conductivity, TDS, salinity, specific resistance, dissolved oxygen (0.00 to 600 Percent Saturation)
pH Calibration	3-point with 4 predefined and 1 user-defined buffer groups
Data Memory	99 GLP data records
Display	High-contrast with large figures
Package Dimensions	13.4 x 9.9 x 4.3 inches
Item Weight	4.15 Pounds
Manufacturer	Mettler Toledo

9. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Mettler Toledo website or contact their customer service. Keep your purchase receipt as proof of purchase for warranty claims.

Mettler Toledo Official Website: www.mt.com

For service or repair, contact an authorized Mettler Toledo service center.

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