

MicroPurge® Flow Cell Quick Start Guide

MP25 & MP25T



Set up Flow Cell:

1. Remove storage cup from sonde
2. For MP25, attached flow cell adapter to the threads on the sonde bottom cap.
3. Insert sonde/adaptor into flow cell and push into bayonets slots, then turn sonde clockwise to lock.
4. Determine necessary flow cell inlet connection fittings based on pump discharge tubing type and size.
5. Connect the included flow cell flexible tubing from pump to flow cell and then from flow cell discharge to purge water collection bucket.

Connect to App:

1. If not already installed, download and install the MicroPurge Android app on your Android device (tablet, phone or Android OS laptop)
2. Enable the Bluetooth connection on your device for pairing.
3. Locate the Bluetooth ID on the bottom of the MP25 external battery pack
4. Launch the MicroPurge and watch for the Bluetooth ID to appear on the screen after 1-2 minutes.
5. Select the ID on the screen to connect the sonde to your device.
6. After the Sonde has successfully connected, press Settings, MicroPurge Sonde then at the top of the list press Calibrate.

To Calibrate:

See opposite side for *Quick Start Calibration Guide*.

To Start PurgeScan Logging

1. Select the desired parameters to be measured from the Purge Scan > Sensors & Parameters menu and hit Save
2. Select desired Stabilization parameters from the Purge Scan > Stabilization Criteria menu and set the desired stabilization range for each parameter in percent or units
3. Select Logging Interval using the pulldown menu from 1-10 minutes
4. If desired, enable the Trending function using the on/off toggle button on the Stabilization Criteria screen
5. Save Stabilization parameters and Logging Interval.
6. Create PurgeScan log name or select from an existing file.
7. Hit OK
8. From the Tablet/Phone menu, look to see where the PurgeScan log files are being saved. "Using Phone Storage" will save files to the internal device memory; touch this to toggle to switch to "Using SD card if available" to save files to an SD card in the device.
9. If backup logging to the sonde is desired, go to the MicroPurge Sonde > Backup Log Setup and create Backup Log file name or select from an existing file.
10. Hit OK
11. Turn PurgeScan Log ON and then, in the pop-up window, hit OK
12. If Stabilization function is desired, hit OK in the Stabilization pop-up window.
13. After stabilization has been achieved and purging is completed, go to Settings and select "Turn PurgeScan Log OFF" and then hit "OK" in the pop-up window.
14. To View your saved PurgeScan Log files, hit the View PurgeScan Logs button on the main screen. Select the desired log file name using the pull-down menu arrow in the upper right corner



MicroPurge Application
tinyurl.com/yca18zyq



MP25 & MP25T Manual
tinyurl.com/yawc4kb7



MP25 & MP25T Quick
Calibration Guide
tinyurl.com/y8lfh8j8

MicroPurge® Flow Cell Quick Calibration Guide

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Sensor Calibration

To Start:

7. Connect Sonde to the Bluetooth Battery Pack and then connect to your tablet or smartphone through the MicroPurge™ App. (See section 3.2 in the MP25 O&M Manual for more details.)
8. After the sonde has successfully connected, press Settings> MicroPurge Sonde > Calibrate.
9. Set up the MP25 sonde in the calibration stand that slips over the edge of the carrying case and remove the bottom cap from the storage/calibration cup.

To Calibrate:

1. Select Parameter to Calibrate, then press Calibrate
2. Enter Calibration Standard into the text field and hit done on the keypad.
3. Pour Calibration Standard into storage/calibration cup until sensors are fully submerged.
4. Wait up to 1 minute for number to appear on lower right corner of dialog box.
5. Hit OK

After this point the application will bring up another dialog box to calibrate to a second standard if applicable (e.g., pH or turbidity). Follow the same steps above for the second standard. After successful calibration of second standard the application will prompt for a third standard calibration for pH; this is not necessary but is recommended for a more accurate data representation.

To Calibrate Barometric Pressure for HDO (choose one method):

15. Set the BP by typing in the correct pressure, if known, into the first test box. If entered the elevation will be automatically estimated and shown in the second box. This value should correlate with your current elevation.
16. The BP can be estimated by entering the altitude into the second text box. If entered the BP will automatically be estimated and shown in the first box.

Common Calibration Parameters and Standards

Sensor	Standard Method of Calibration	Available Calibration Solutions	Comments
Temperature	Never requires calibration	N/A	
pH / pH Reference	2 or 3 points	pH 4, pH 7, pH 10	pH 7, pH 10 most common
ORP	1 Point	ORP Standard Solution, such as ZoBell's or Light's solution	ORP standards can range from 200 – 475 mV, any will work
Conductivity	1 Point	CD Standard, 0.5 Molar, 58670 Micro S CD Standard, 0.1 Molar, 12856 Micro S CD Standard, 0.01 Molar, 1412 Micro S CD Standard, 0.001 Molar, 147 Micro S	brackish/saltwater borderline brackish water typical freshwater very pure fresh/glacial water
Reference Electrode	calibration not required	N/A	replace pH electrolyte solution at routine calibration
Depth	Adjust for barometric pressure	N/A	Recalibrate at deployment site for best accuracy
Turbidity	2 points	0 NTU, 10 NTU, 100 NTU, 400 NTU	calibrate near expected value
HDO (Optical DO)	calibrate at 100% saturated water	DI water shaken vigorously to oxygenate	set BP before calibrating, recalibrate at deployment site for best accuracy