VENUS LAB
AUTOMATIONS

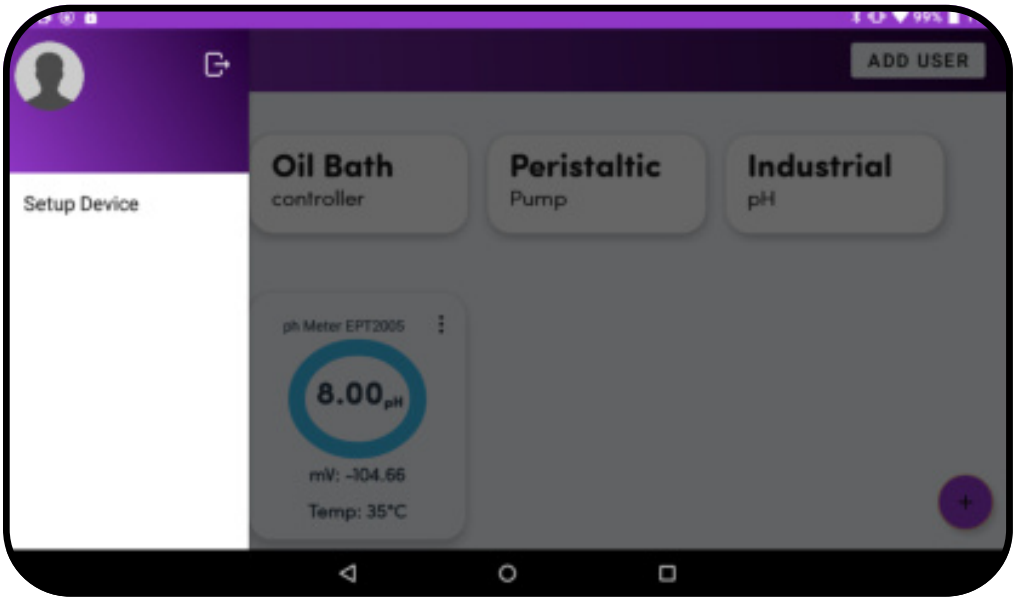
INSTRUCTION MANUAL

App Setup

1: Power ON the tablet and open Lab 4.0 app.

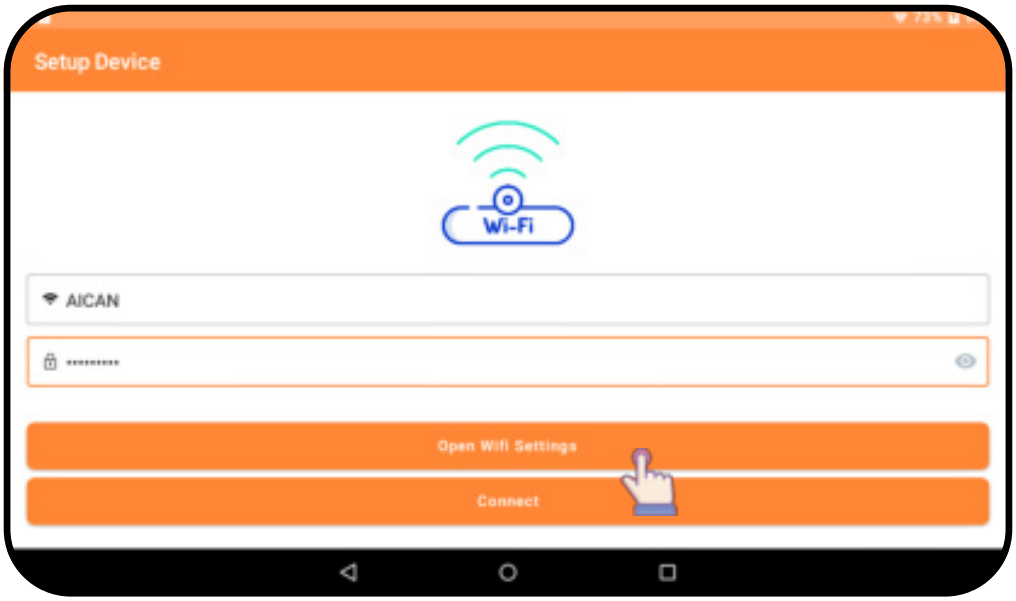
2: Open the app and sign up with your email ID and password or Sign in with an existing account.

3: Open the navigation drawer and click on ‘Setup Device’.



4: Take the pH meter unit and make sure it is powered off. Now hold down the Wi-Fi button (button below the slider switch) and while keeping the button pressed, turn on the device (switch the slider button donwards)

5: Click “Open Wi-Fi Settings” once the blue LED starts blinking.



6: Connect to the Wi-Fi named AICAN_PHPXXXX (Default Password : 12345678) and press “Decline” if following popup appears.

7: Press ‘Back’ in the application and enter the SSID and Password of your home Wi-Fi network and Click ‘Connect’.

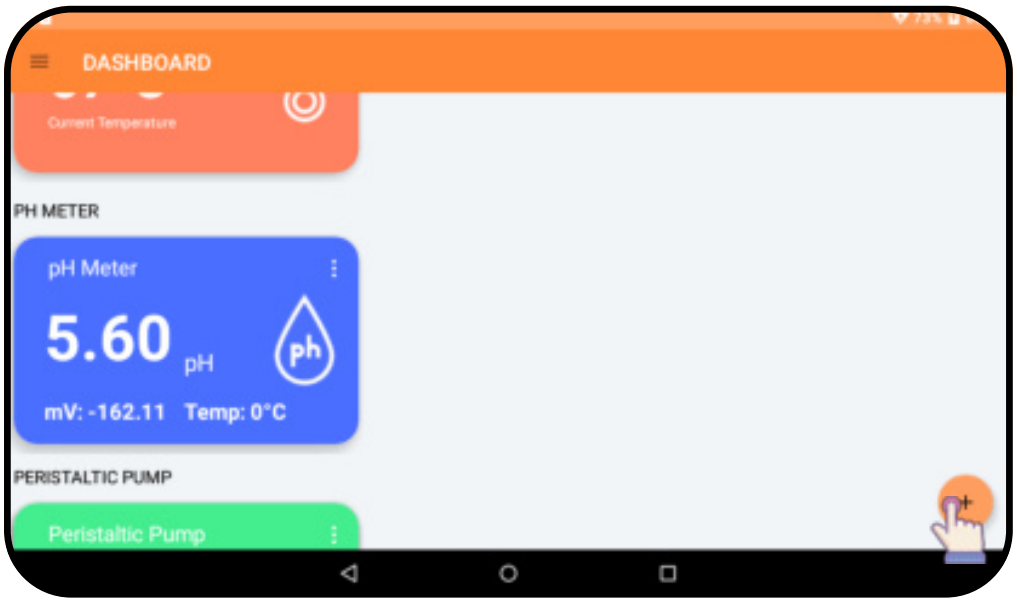
8: If the credentials are correct, then device will be connected to the network and LED will be ON continuously.

(Make sure if Wi-Fi is connected then it should have active internet connection at all times for device to work properly).

9: If connection fails, repeat from Step 3.

Device Setup

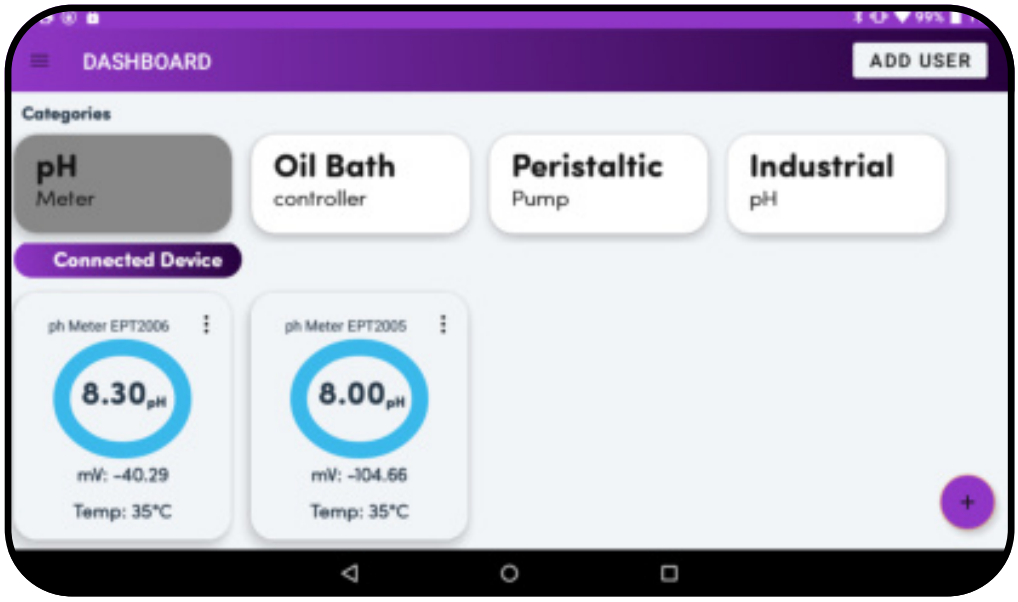
1: Click on the ‘Add’ button at the bottom right corner of the home page.



2: Select ‘pH meter’ in ‘Select Device Type’ page to register a new device.

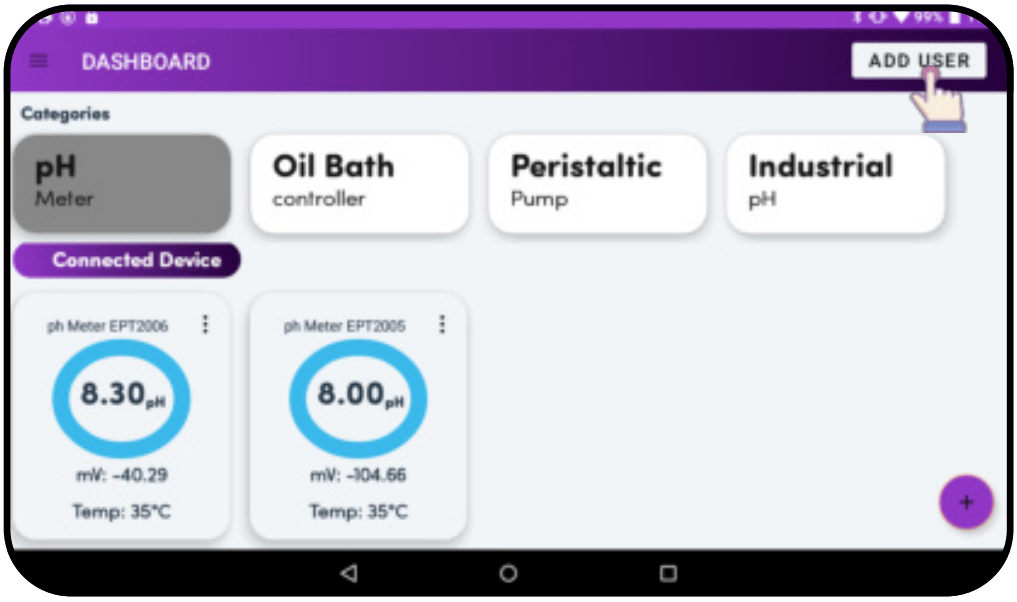
3: Scan the QR code on the back of the manual. (refer to Page 16).

4: The device should appear on the dashboard page of the application.

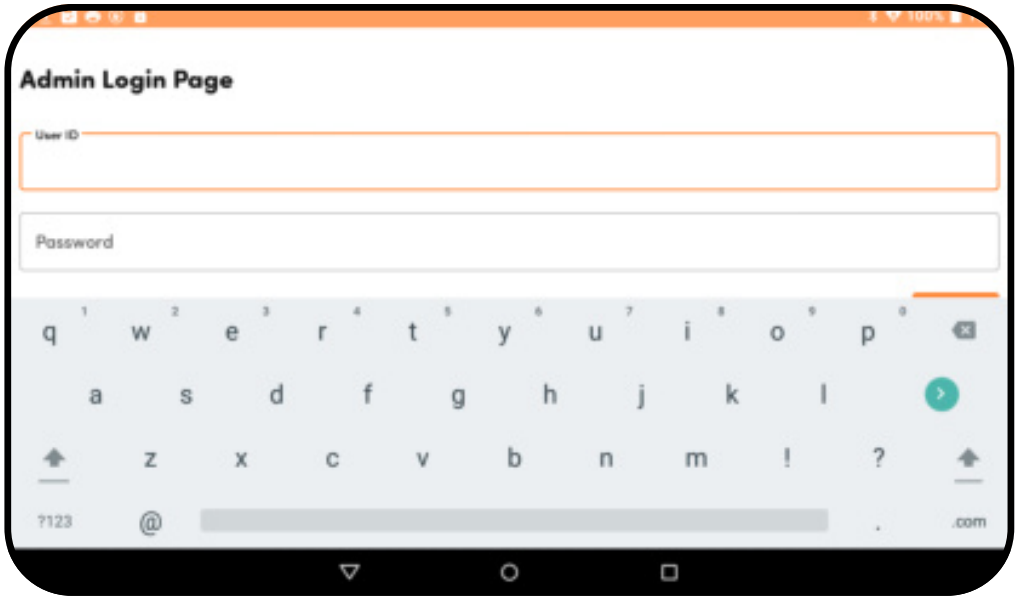


Add Users

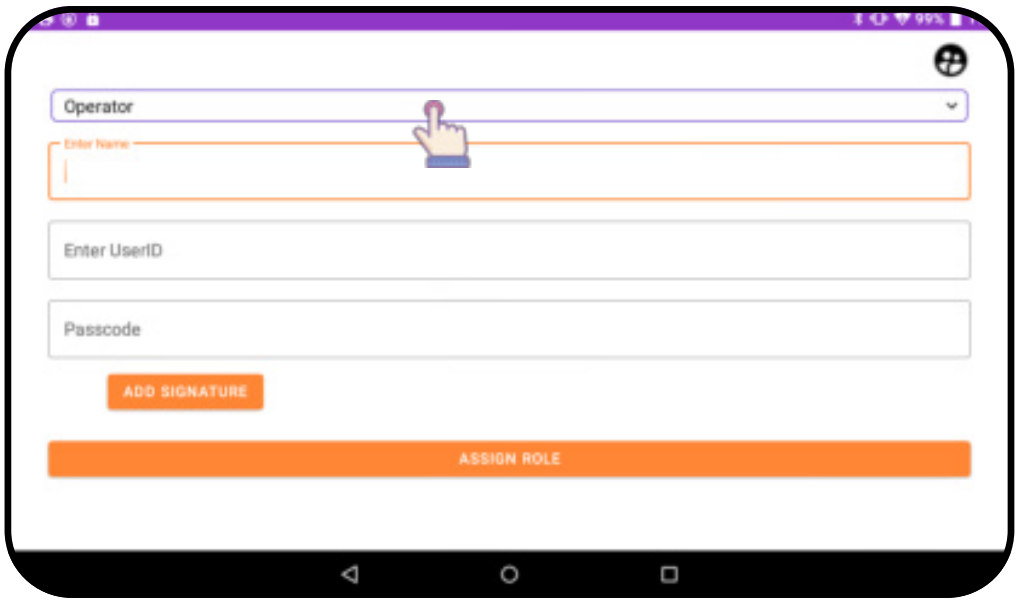
1: Tap on the “ADD USER” button on the top right corner of the screen.



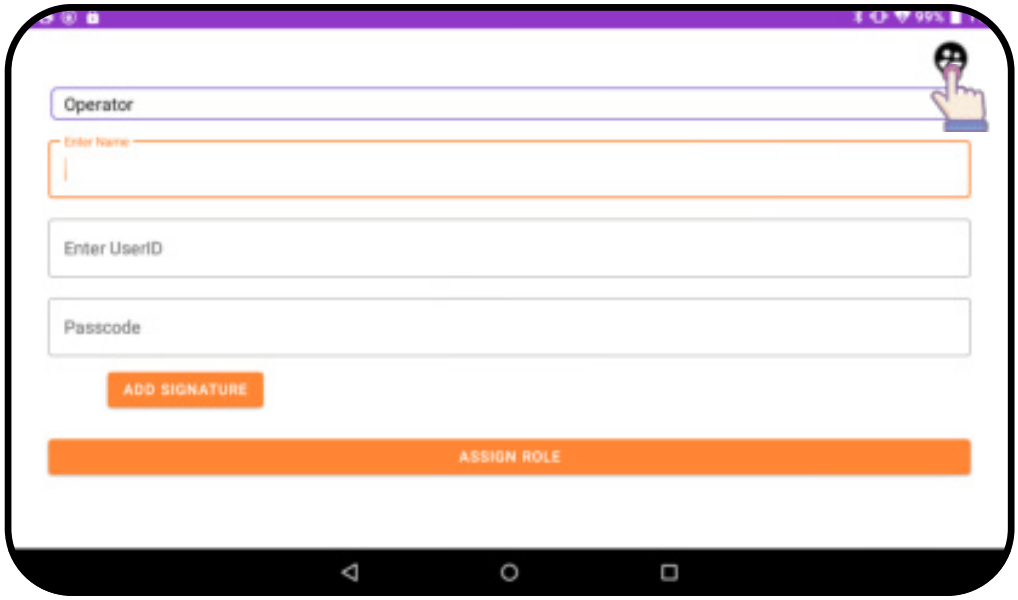
2: Enter the login credentials used while registering the account.



3: Enter the credentials for the new user and choose the role from dropdown menu.



4: Click on ‘ASSIGN ROLE’ for registering the user.
5: To delete the user from the database, click on user database button on top right corner of the screen.

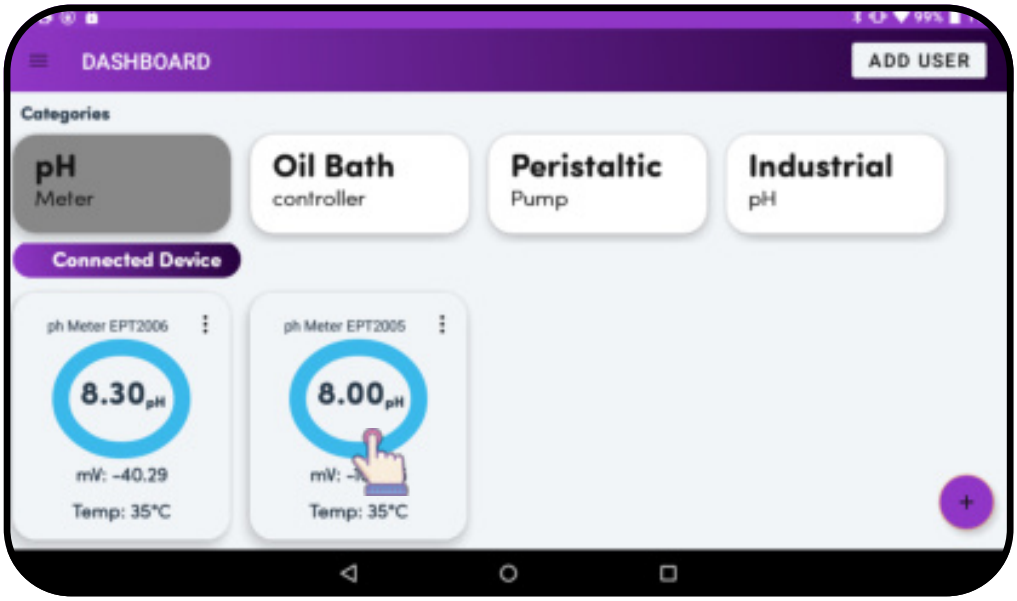


6: Enter the admin login credentials.

7: User database activity will be displayed. You can long tap on the user which needs to be deleted.

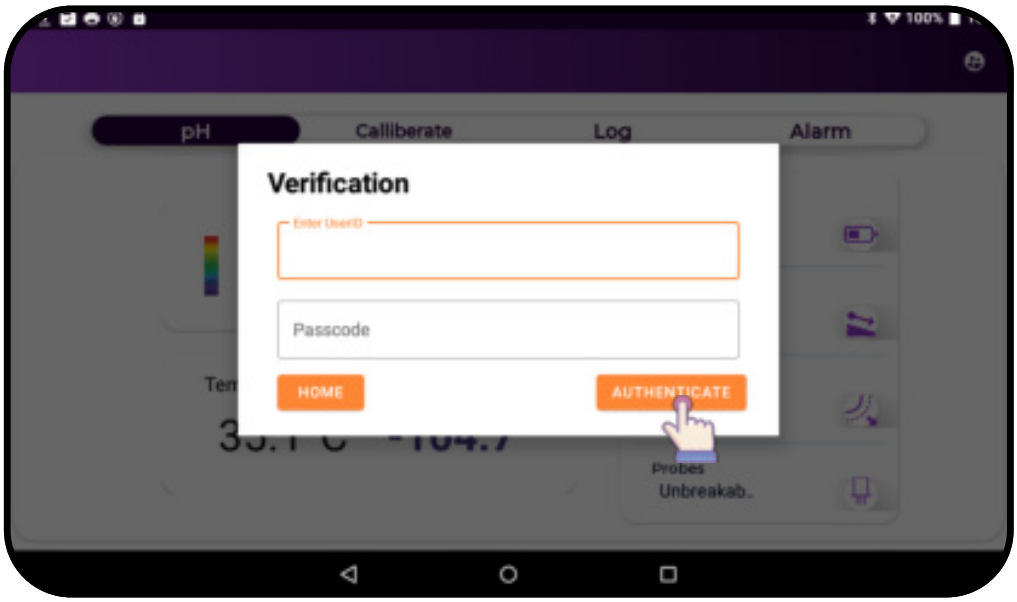
App Navigation

1: Device card on main page gives realtime pH and temperature readings.

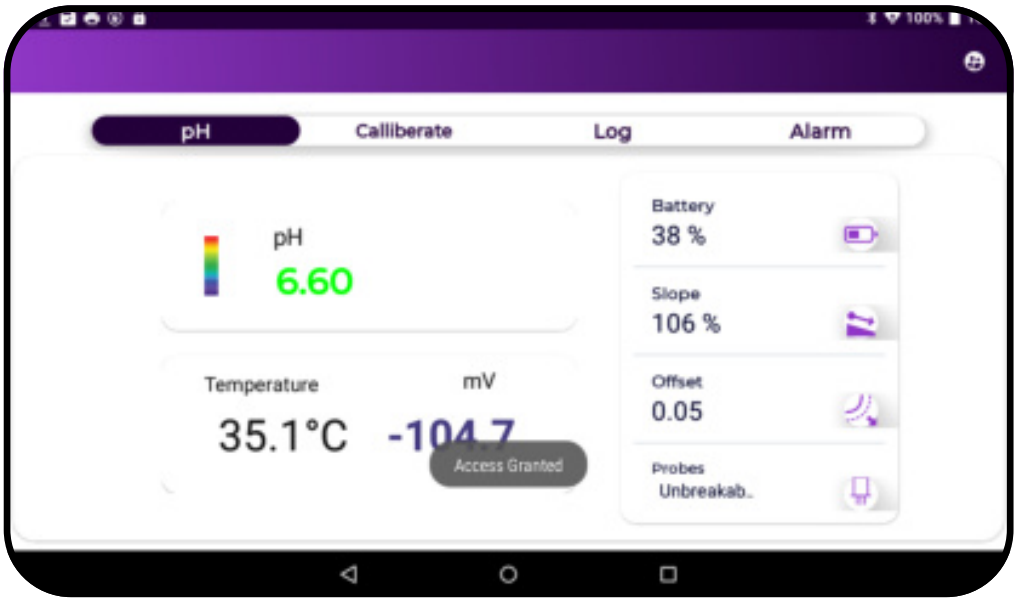


2: Tap on the pH device card to access all the features of the device.

3: Enter Operator/Supervisor Credentials to access each menu.

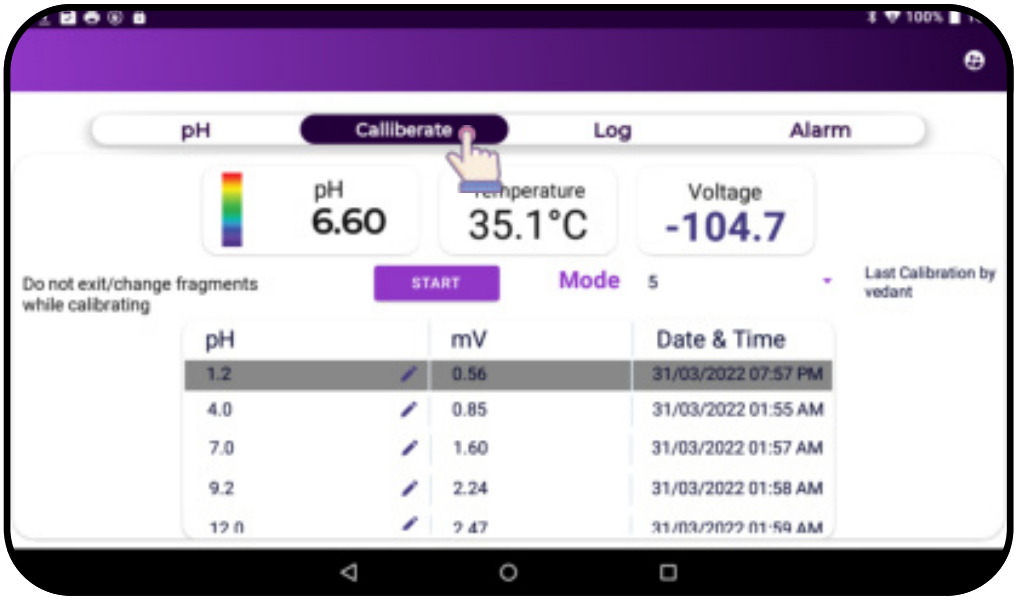


4: pH tab shows the realtime values from the device with additional detail.

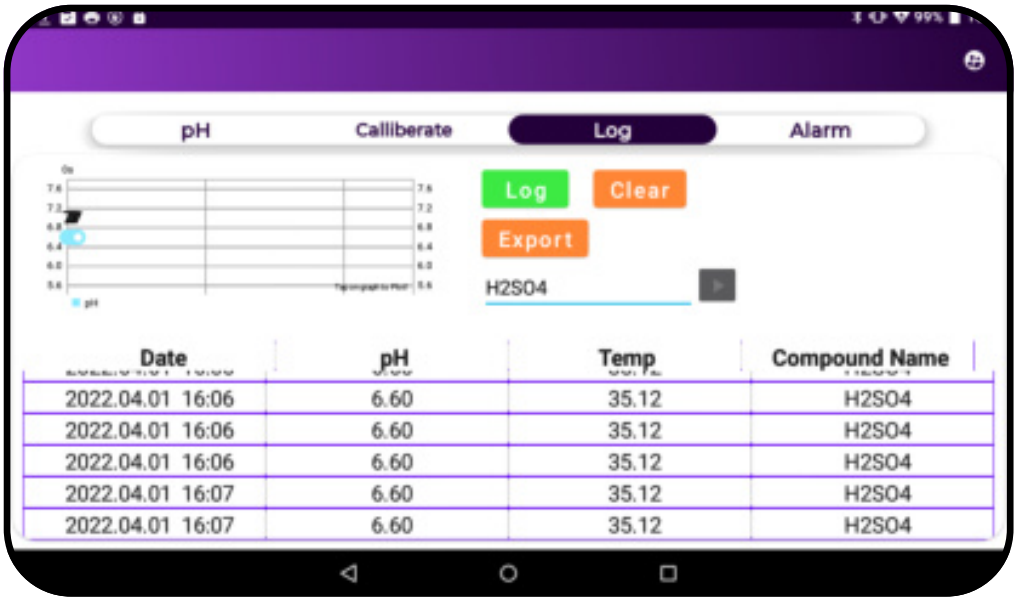


5: Tap on Calibration tab to enter calibration mode (refer probe calibration secion - page 19)

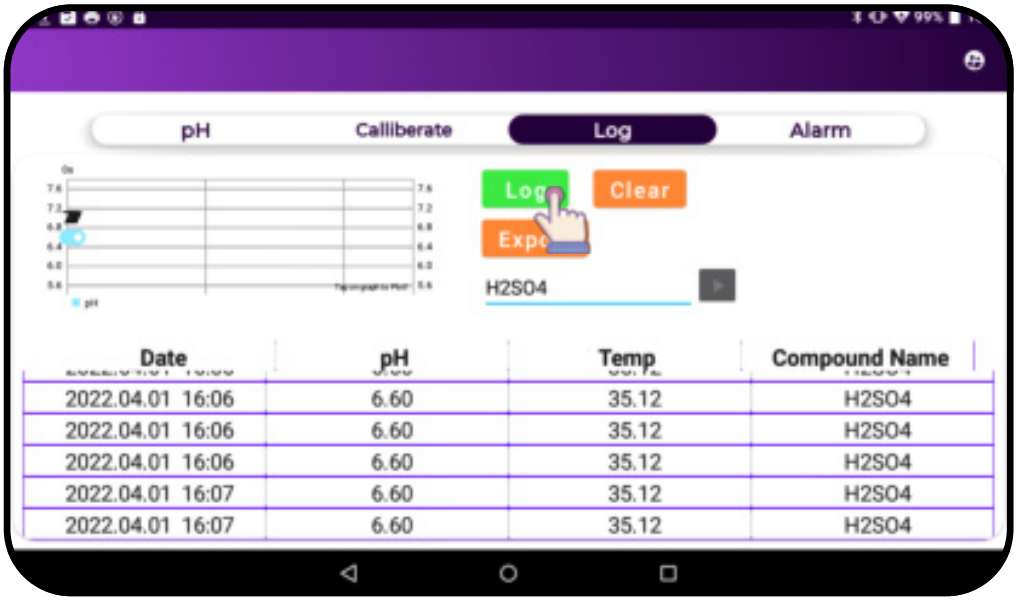
6: Enter Operator/Supervisor Credentials to access other menus.



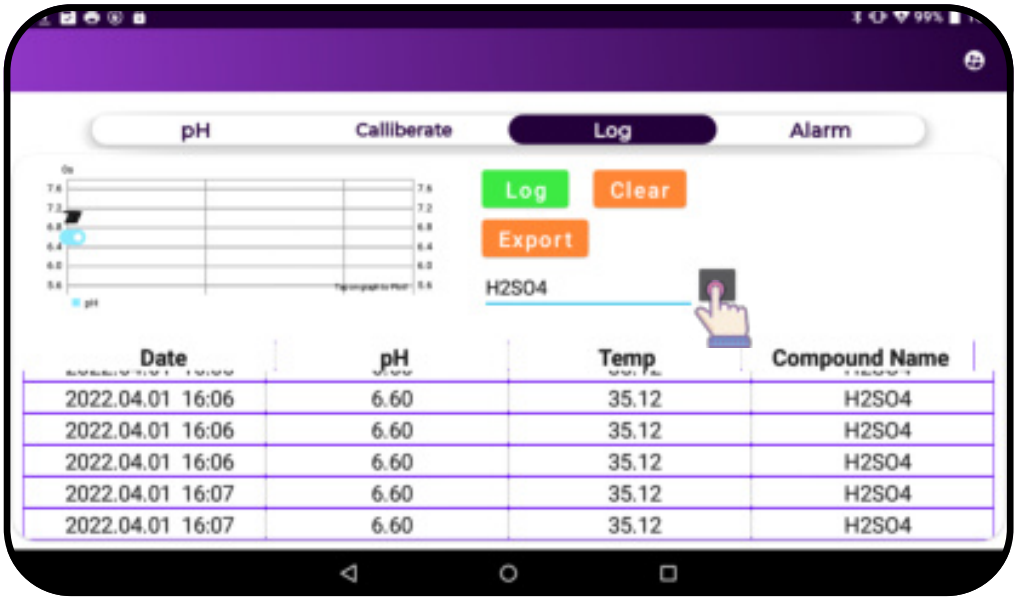
7: Tap on Log menu to log data.



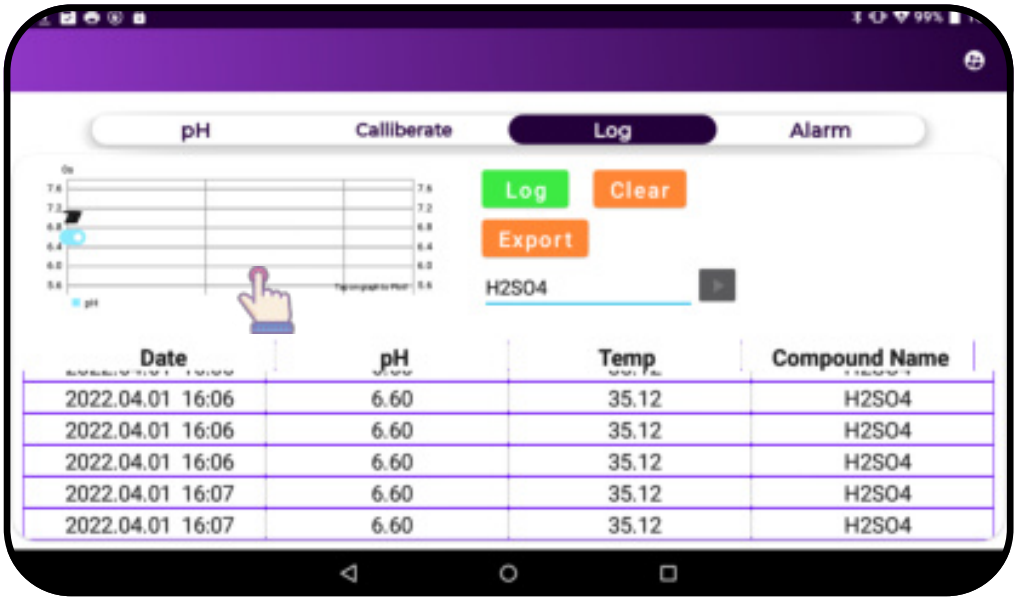
8: Tap on ‘Log’ button to save the real-time reading in the log table.



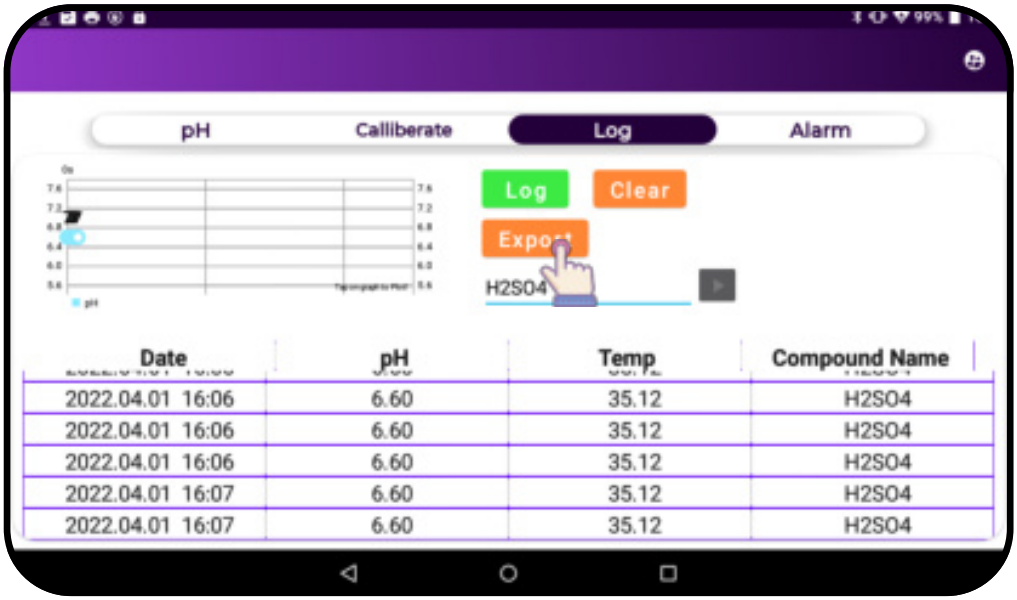
9: Tap on compound name to edit or delete the compound name and press the send icon (shown below) to update the database.



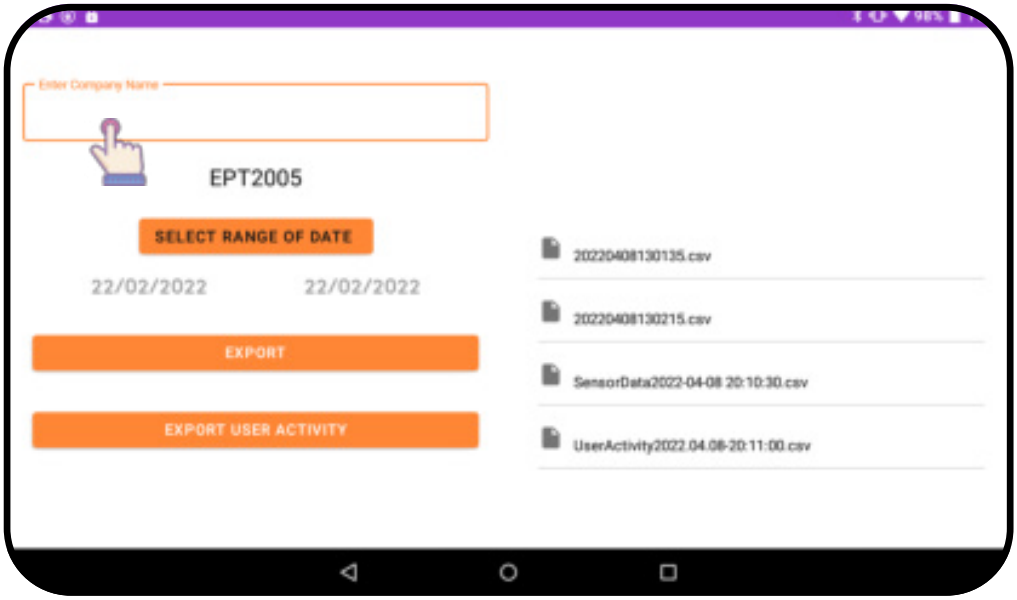
10: Tap on the graph for real time updation of pH values against time.



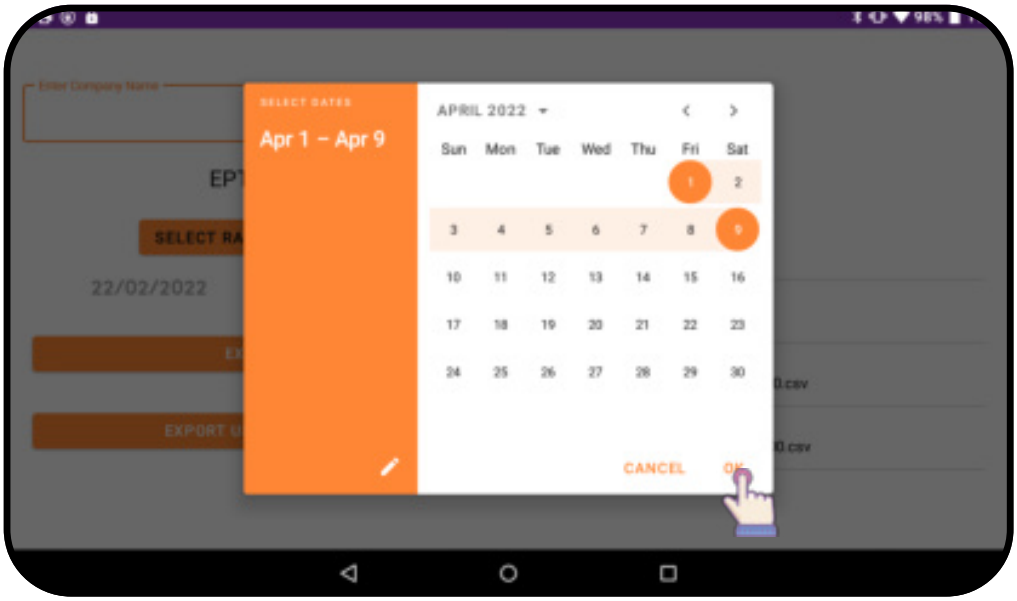
11: Tap on ‘Export’ button and submit Supervisor credentials to enter export activity.



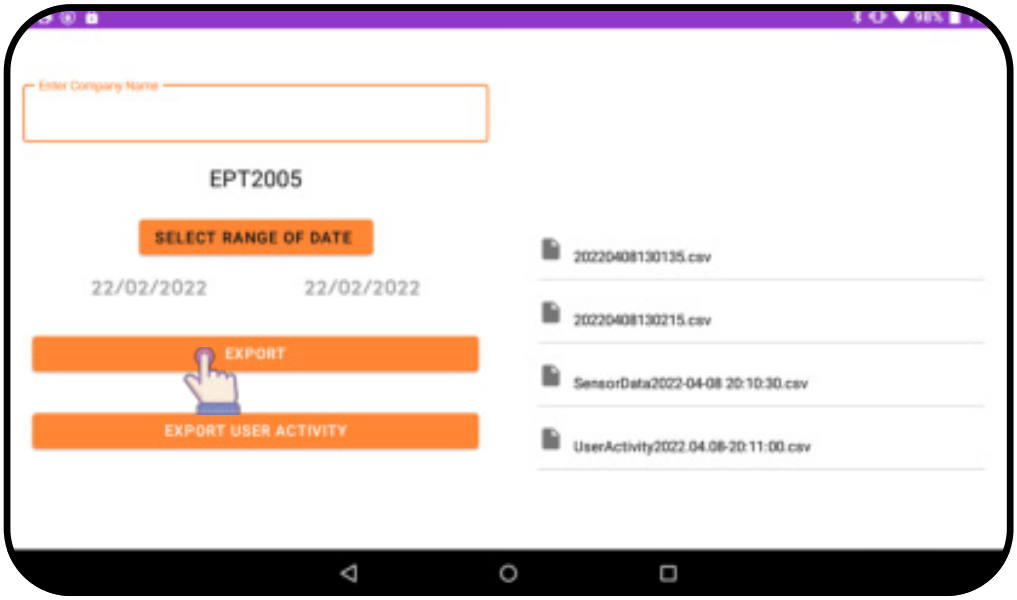
12: Enter the company name (it will appear on the exported document).



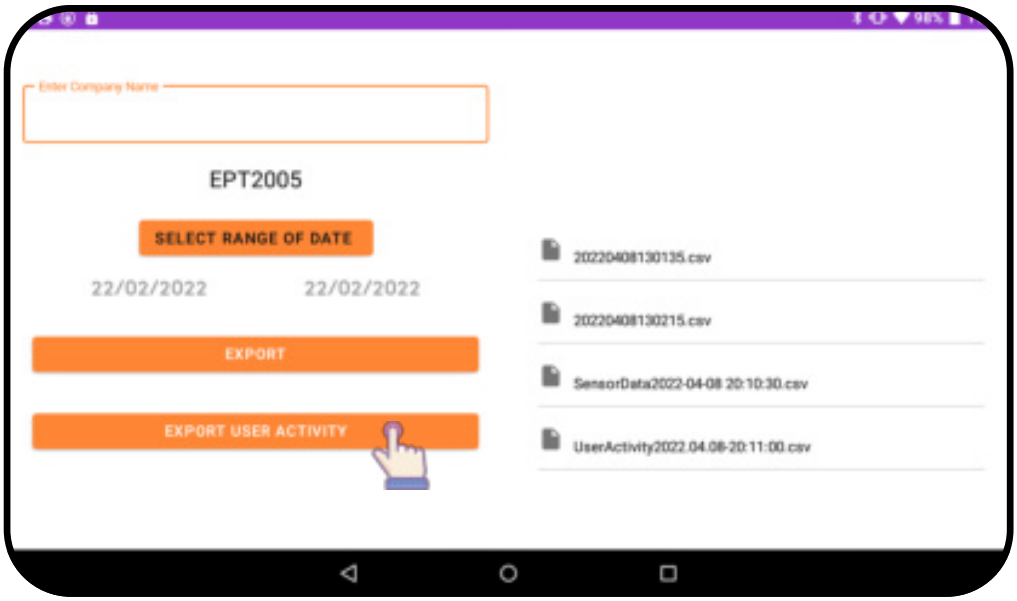
13: Select Start date and End date fow which data will be exported.



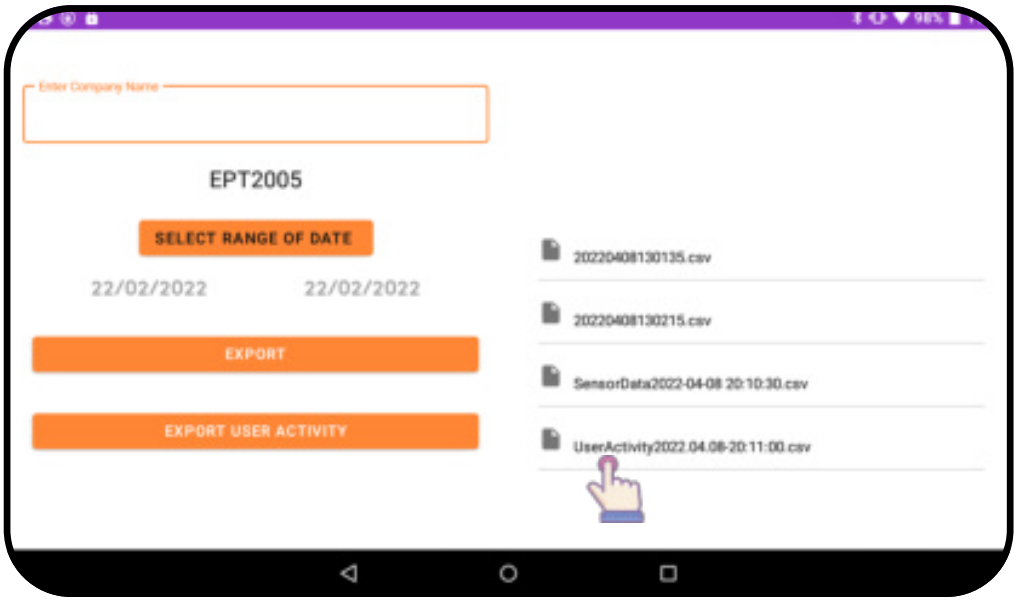
14: Press ‘Export’ button to export latest calibration and log table data for the selected date range.



15: Press ‘Export User Activity’ button to export all the user activities for the selected data range.

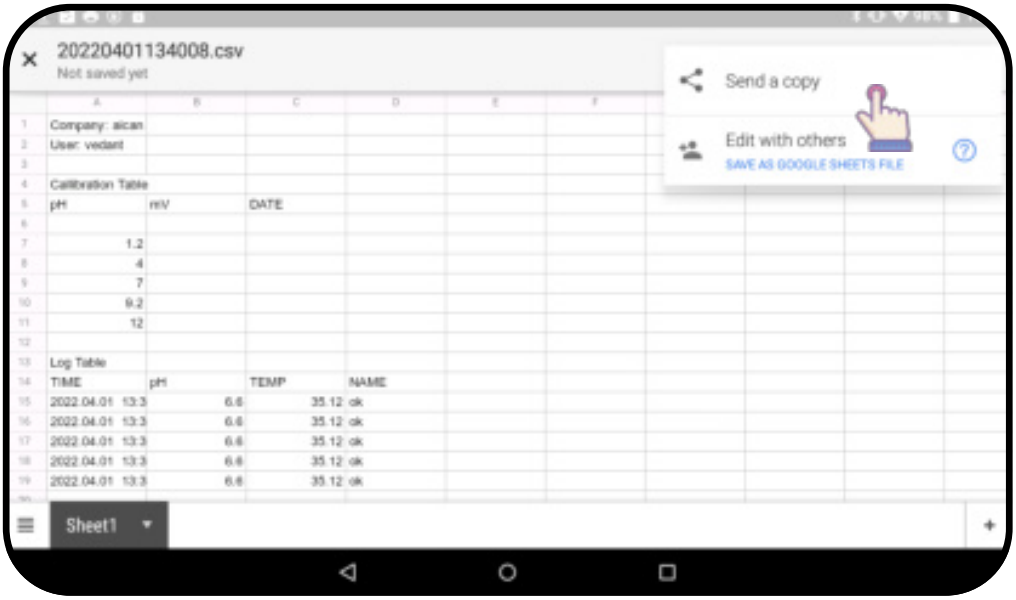


16: Generated files will be listed on right side of the screen.

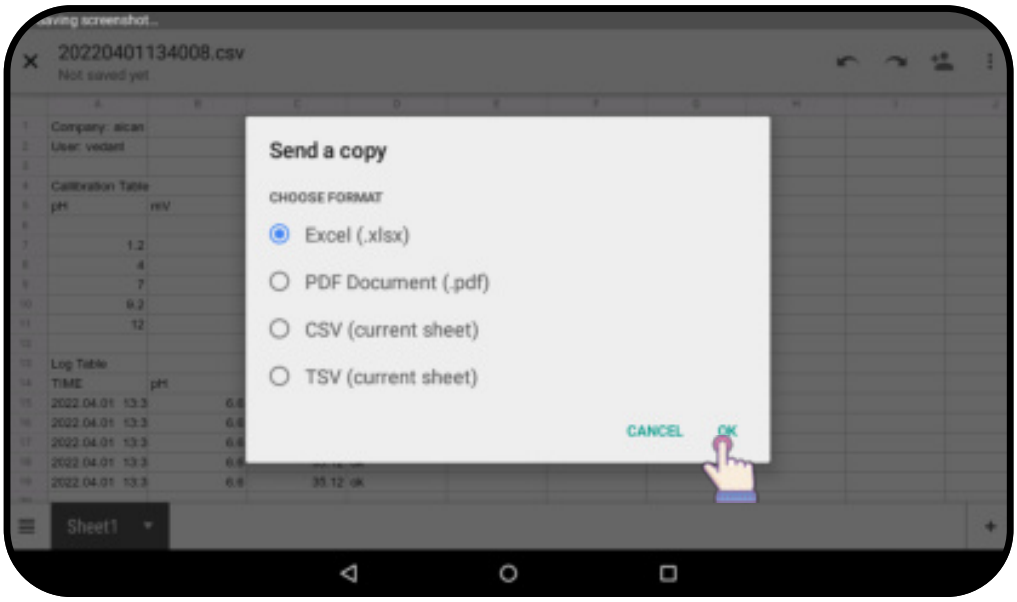


17: Click on the file to view the data (no editing/ manipulation of data is possible).

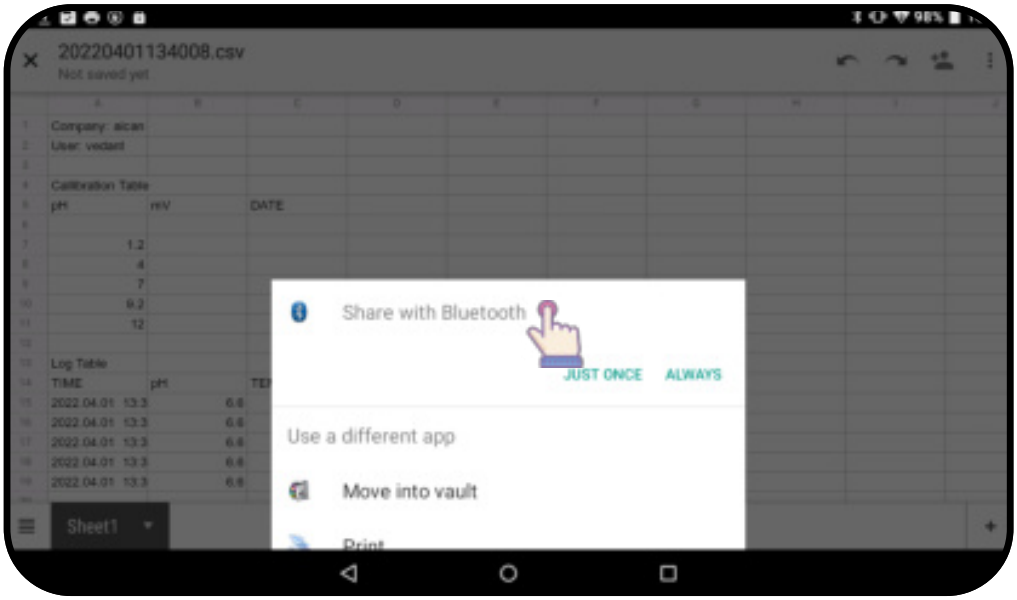
18: Click on ‘send a copy’ to share the file for printing.



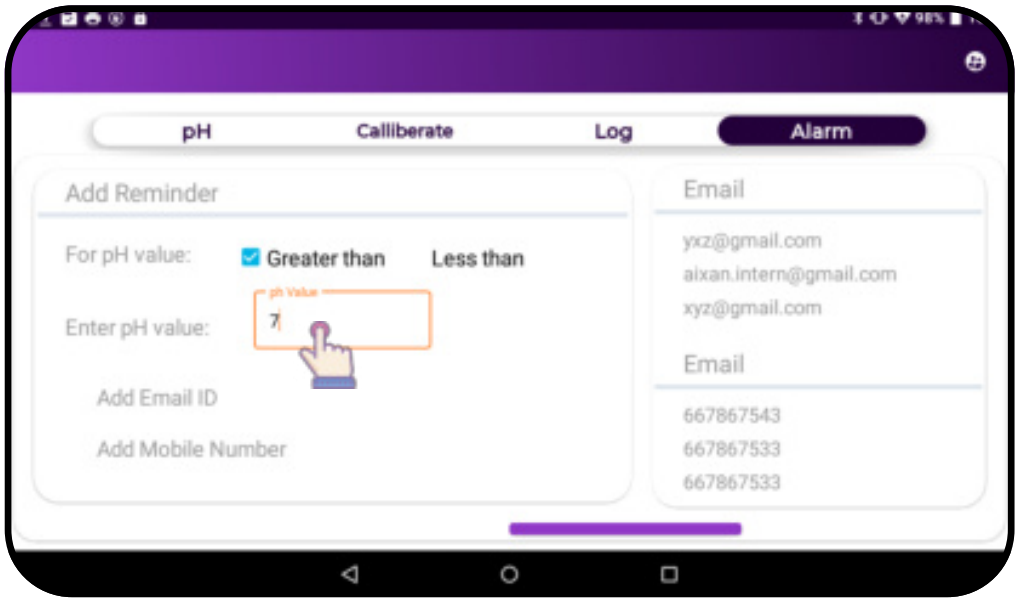
19: Select the format as per your requirement.



20: Select “Bluetooth” and choose the device from the list to share the file.

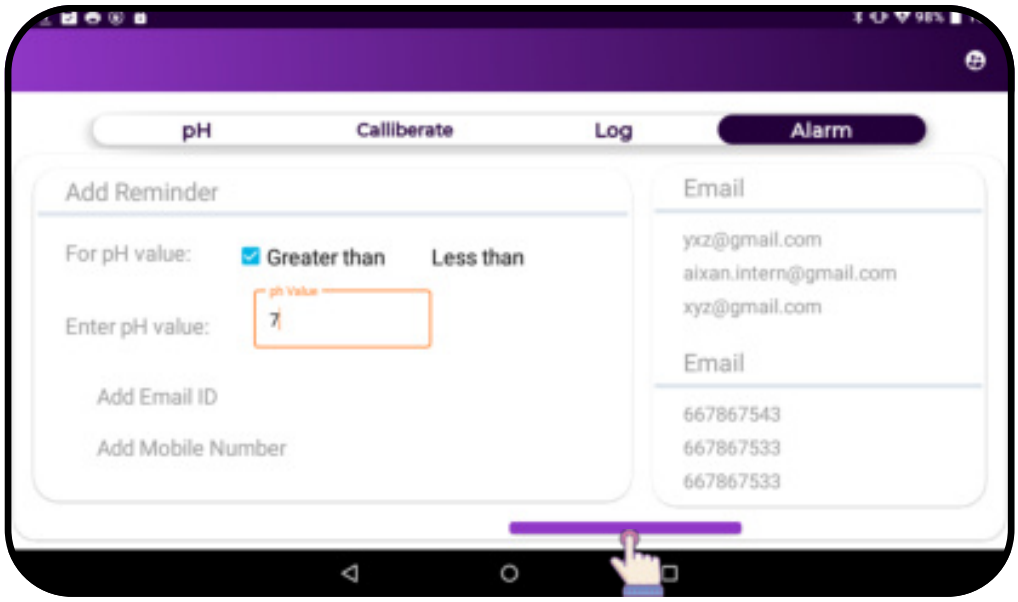


21: Tap on Alarm tab to set Alarm.



22: Select the condition and enter the trigger point for raising the alarm.

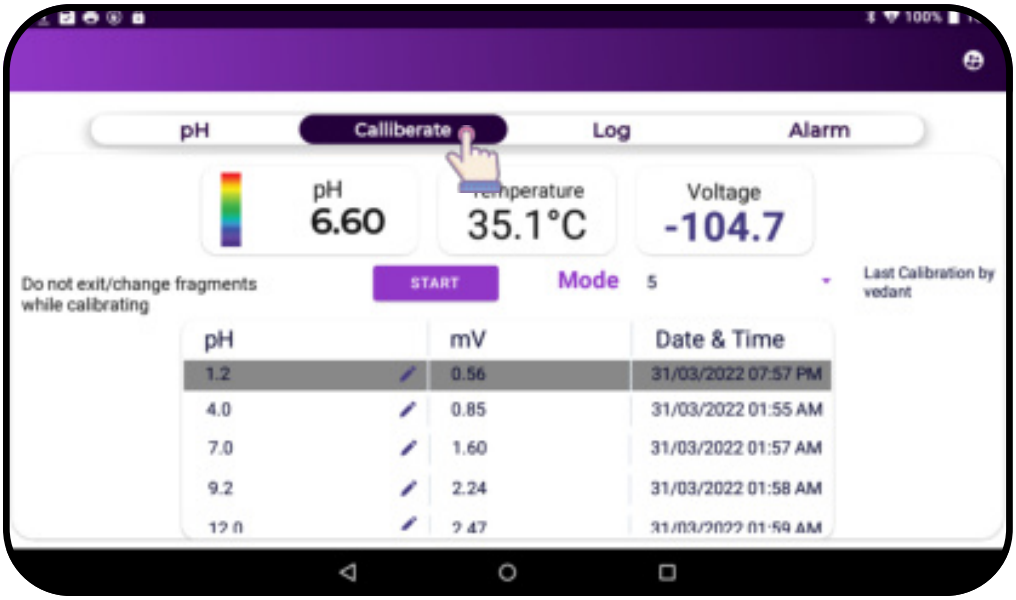
23: Tap on ‘Save Alarm’ to start the alarm (when the condition is satisfied a buzzer will ring from the tab).



Probe Calibration

(NOTE:
1: The pH meter follows 5-point calibration routine, hence calibration with 5 buffers is mandatory.
2: Follow the calibration procedure in ascending order i.e. calibrate the buffers in increasing pH sequence to get accurate readings. (Example: Buffer 1 - 1 pH, Buffer 2 - 4 pH, Buffer 3 - 7 pH...)

1: Tap on Calibration tab to enter calibration mode

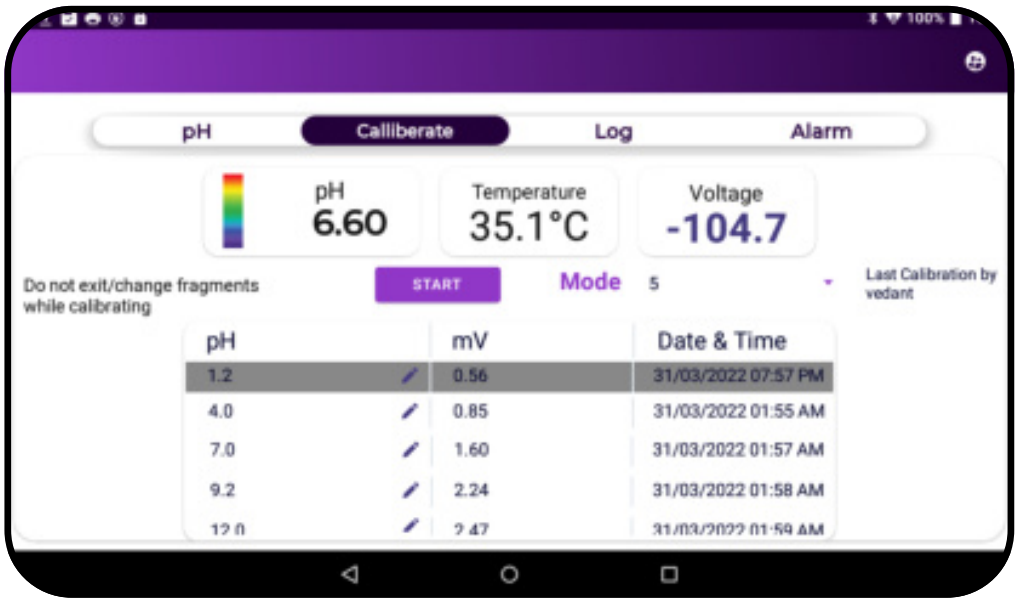


2: Dip the probe in a buffer solution of pH 1 (pH 1 row should highlighted).

3: Click ‘Start’ and wait for the calibration timer to end.

4: After the countdown is complete, a value will be displayed in the mV column and current date time will be updated.

5: Next row will be highlighted to indicated corresponding buffer solution.



6: Clean the probe and dip it in next buffer solution of pH 4. Repeat the above steps for all the buffer solutions.

7 : When calibration is completed, go back to the pH menu.

Probe Maintenance Notes

1:When the probe is used for the first time or used for some time, the probe needs to be immersed in the 3NKCL solution for 8 hours.

2: The glass bubble in the head of the pH probe(in the plastic protection grid) shall not come in contact with the hard objects, and any breakage or rubbing will invalidate the probe.

3: When the measurement is finished, the protective cap should be put on, and a small amount of 3mol/L KCL solution should be put inside the protective cap to keep the glass bulb moist.

4: The plug of the pH probe must be kept clean and dry, absolutely prevent the output ends short-circuit, otherwise, it will result in inaccurate measurement or probe failure.

5: The probe should avoid long-term immersion in distilled water, protein, acid fluoride solution, and prevent contact with silicone oil.

6: After long-term use, if you found that the percentage of the theoretical slope of the probe (PTS) slightly reduced, you can soak the lower end of the probe in 4%HF (hydrofluoric acid) for 3-5 seconds, wash with distilled water, and then soak in the 0.1MOL/L HCL solution for a few hours, rinse clean with deionized water.

7: Attention should be paid to the selection of the cleaning agent. The soluble polycarbonate cleaning liquid, such as carbon tetrachloride, trichloroethylene, four furans and so on, may stained glass ball bubble surface, and make the probe failure, please use these with great caution!

Highlights

Improved visualization using graph analytics

Calibration modes for enhanced accuracy

Automatic Temp. Compensation

Remote real-time monitoring and logging

To know more about our products or get in touch with us:

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