

IoT



pH Meter

Users guide

Quick setup guide

The IoT pH meter has been completely installed onto a Raspberry Pi and both EZO™ circuits are set to I²C mode, but there's a very small amount of work that needs to be done before you can take readings.

Step 1 Hardware assembly

1. Connect both probes to their respective BNC connectors on the back of the case.



2. Locate the power supply, and plug the micro USB end into the USB splitter.



3. Connect both ends of the USB splitter into the two USB ports on the back of the case.



4. Plug the power supply into an outlet, and press the on/off button on the power supply cable.



Step 2 Boot up

Once the IoT pH meter has been turned on, it will begin to boot up. **This process may take up to 1 minute.** Once the boot up sequence is complete, you will be at the Windows IoT core page.

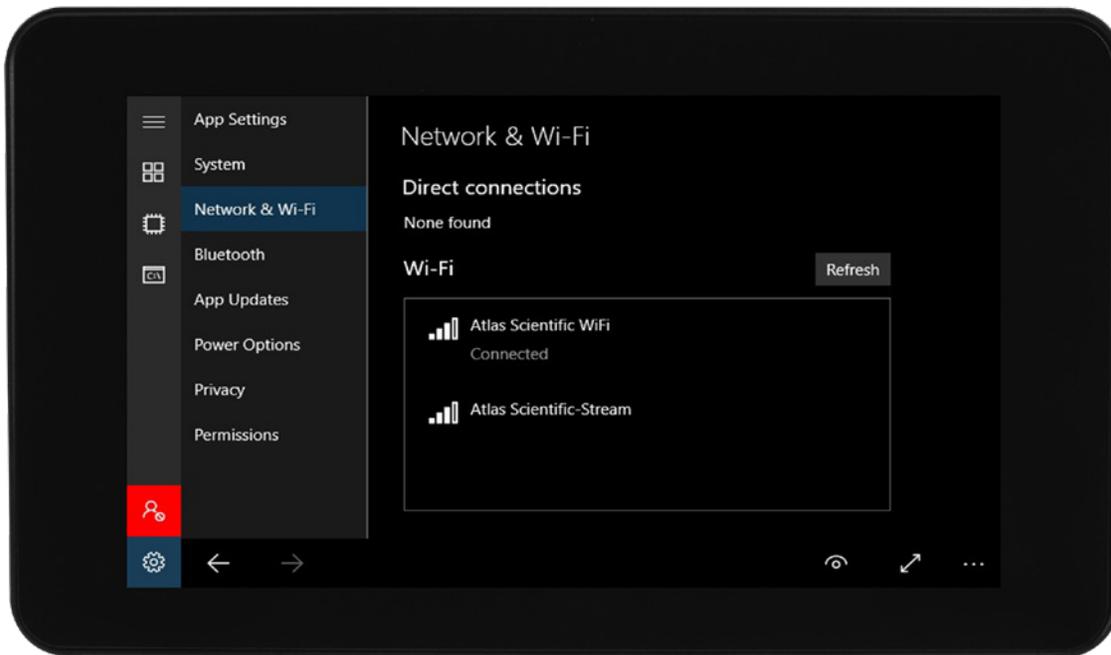


Step 3 Setup Network / Wi-Fi

If you want to connect a network cable directly into the IoT pH Meter, there is a network connection port located on the back. However, if you want to use Wi-Fi follow the steps below.

To connect the IoT pH Meter to your Wi-Fi, press the gear (⚙️) button located at the bottom left corner of the screen, then press **Network & Wi-Fi**.

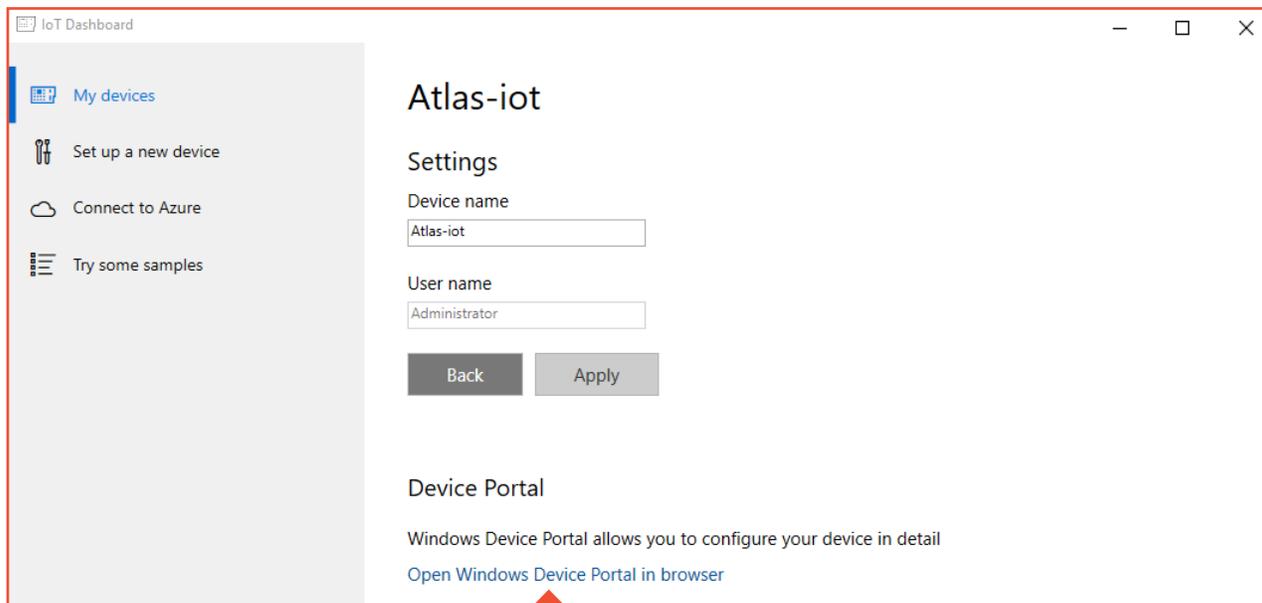
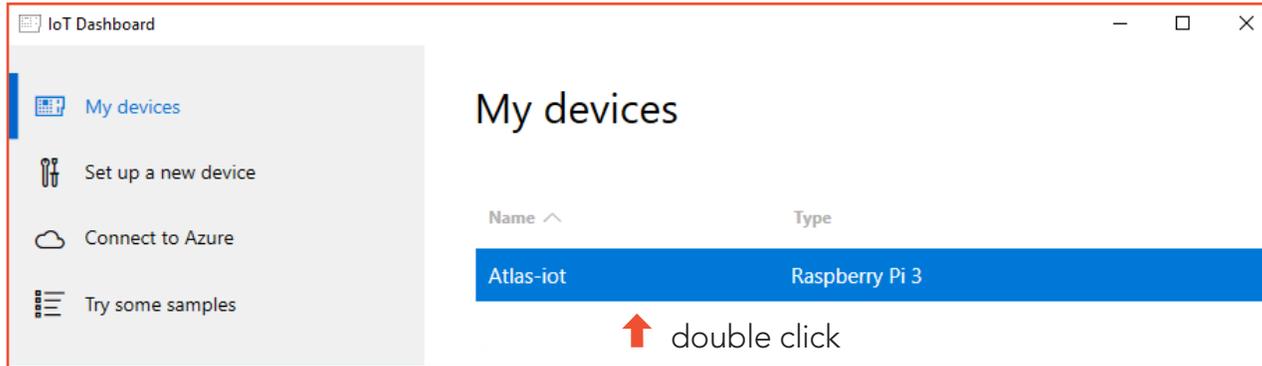
From here, connect to the Wi-Fi network of your choice.



Step 4 Windows IoT Core Dashboard

Now that the IoT pH meter is connected to the internet, it's time to adjust a few settings from the back end via the Windows 10 IoT Core Dashboard, click [HERE](#) to download the setup file.

Once you open the IoT Dashboard, you should see **Atlas iot** listed under My devices.



Click here and a web page will open and will ask you to log into the IoT pH Meter .

Username: **administrator**
password: **atlas**

Step 5 **Adjust settings**

You are now in the device portal (*back end*) of your IoT pH Meter. Under **Device Settings** you can make adjustments to things like display orientation, resolution and time zones.

If you don't have any settings to adjust, move on to step 6.

The screenshot shows the Windows Device Portal interface. The top navigation bar includes 'Device Settings - Windows Device Portal', 'Help', 'Feedback', and 'Power'. A message at the top states: 'This is a Windows 10 IoT Core test image designed for prototyping only. If you are looking to commercialize, you must use a custom FFU for optimal security.' The version number 'v.10.0.17763.1' is displayed in the top right. The left sidebar contains a navigation menu with categories: Apps, Azure Clients, Processes, Debug, Devices, Connectivity, TPM Configuration, Windows Update, Remote, Scratch, and Tutorial. The main content area is titled 'Device Settings' and contains several sections: 'New password' and 'Confirm password' input fields with 'Save' and 'Cancel' buttons; 'Change your remote debugging PIN' section with a 'New remote debugging PIN' input field and a 'Save' button; 'Time zone' dropdown menu set to '(UTC-05:00) Eastern Time (US & Canada)'; and 'Display Resolution' dropdown menu set to '800x480 (60Hz)'. On the right side, there is an 'Audio Control' panel with 'Audio Devices', a 'Refresh' button, 'Speaker: Speakers (Raspberry Pi 2 audio)', a volume slider at 65.3, 'Microphone: None', and a 'Screenshot' panel with 'Capture' and 'Download' buttons. The bottom right corner of the page shows 'Atlas-iot Raspberry Pi 3'.

If you make any changes the device must reboot before you can continue.

Step 6 **Startup**

From the device portal (back end) of your IoT pH Meter, click on **Apps > Apps manager**. Here you will see that **Atlas iot** will be displayed on a list of installed apps. Tick the startup button, to begin running the IoT pH Meter software.

The screenshot shows the 'Apps manager - Windows Device Portal' interface. On the left is a navigation menu with options like 'Device Settings', 'Apps', 'Apps manager', 'File explorer', 'Quick-run samples', 'Azure Clients', 'Processes', 'Debug', 'Devices', 'Connectivity', 'TPM Configuration', 'Windows Update', 'Remote', and 'Scratch'. The main area is titled 'Apps' and shows a list of installed applications. The 'atlas_iot' app is highlighted, and its startup button is being clicked. The table below shows the details of the installed apps.

App Name	App Type	Startup	Status	Actions
Connect	Foreground	<input type="radio"/>	Stopped	Actions
IOTCoreDefaultApplication	Foreground	<input type="radio"/>	Running	Actions
IoTUAPOOBE	Foreground	<input type="radio"/>	Stopped	Actions
atlas_iot	Foreground	<input checked="" type="radio"/>	Running	Actions
IoTOnboardingTask	Background	<input checked="" type="checkbox"/>	Running	Actions

Setup complete!

