

BIGTREETECH

Panda Sense

User Manual



Revision Log

Version	Date	Revisions
v1.00	October 21st, 2024	Initial Version

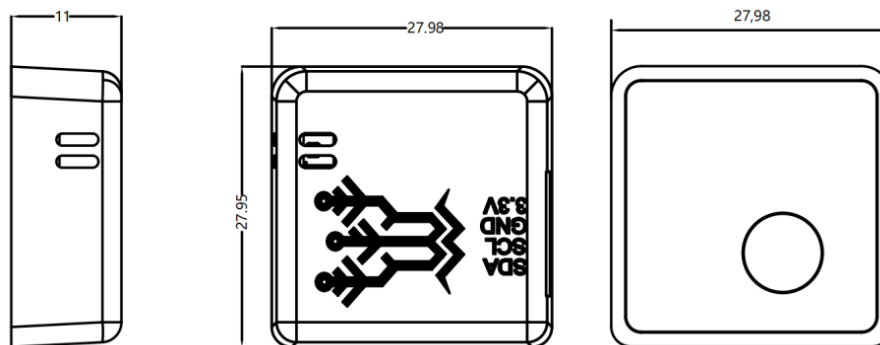
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1. Specifications

Sensor Module	AHT30
Connection Interface	PH2.0 4-pin
Operating Voltage	3.3V
Temperature Detection Range & Accuracy	-40°C - 120°C, $\pm 0.5^{\circ}\text{C}$ (10°C - 60°C)
Humidity Detection Range & Accuracy	0-100%RH, $\pm 3\%$ (within 20%RH - 80%RH)
Dimensions	27.98 x 27.95 x 11mm
Connecting Cable Length	800mm
Panda Touch Firmware Support	Version 1.0.6 or Later

Dimensions:



1.1. Interfaces



- I2C
3.3V Logic Level



- Power Interface
3.3V Input

1.2. Indicator Light

Green Light: Indicates the device is powered on normally.

2. Installation Guide

Required Accessories:



Panda Touch x1



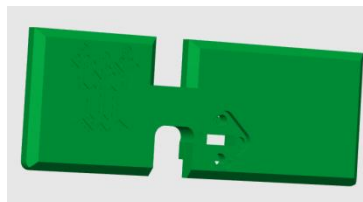
Panda Touch USB Dock x1



Panda Sense x1



Panda Sense Dock & Panda Sense Touch



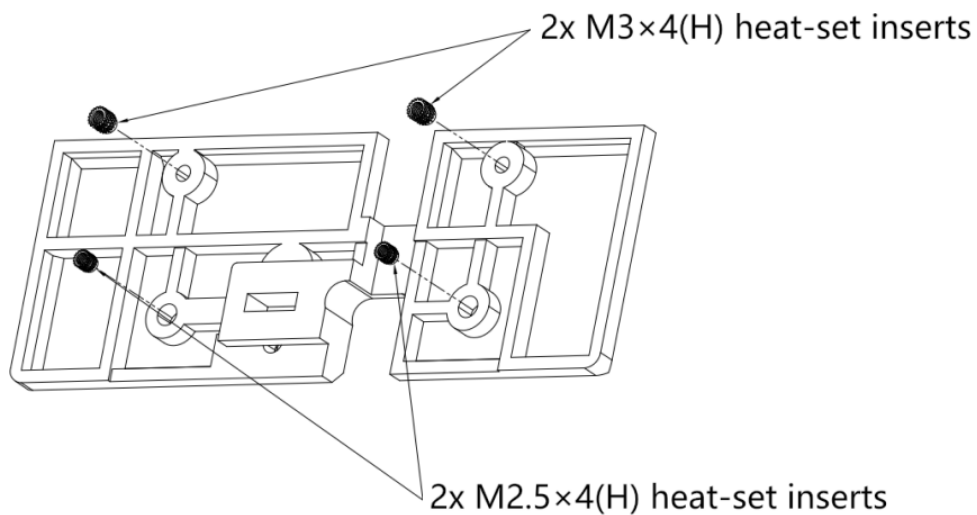
Printed Mounting Bracket: Please download the model files from [https://github.com/bigtreetech/PandaSense/tree/master/Print_Files] and use a 3D printer to print them in advance.

Installation Steps:

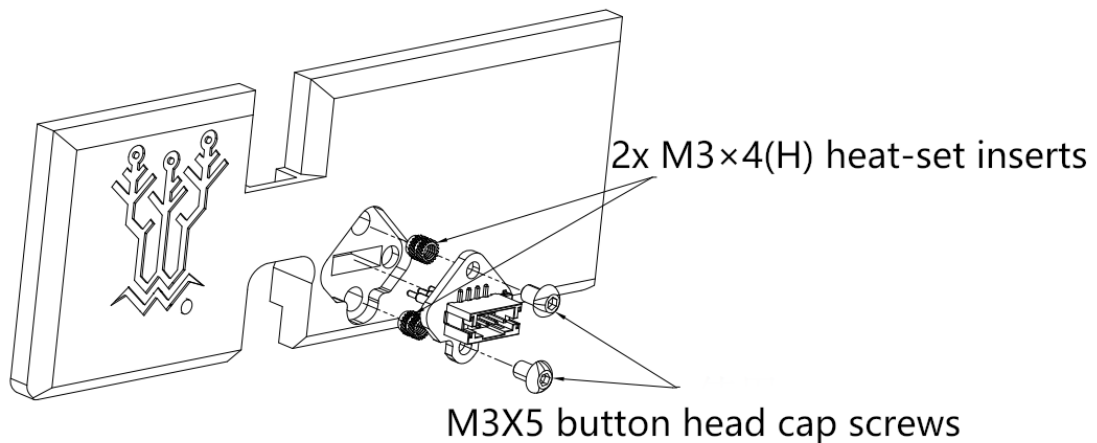
Note: First attach the Panda Sense inside the machine and then arrange the connecting cable.

The firmware for the Panda Touch should be version 1.0.6 or later.

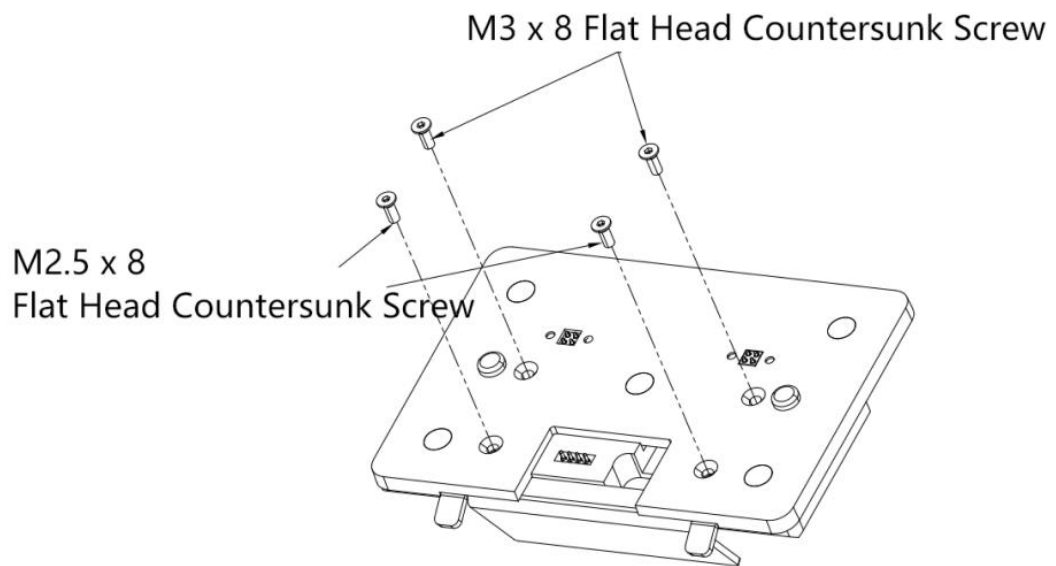
1. Use a soldering iron to install heat-set inserts into the printed mounting bracket.



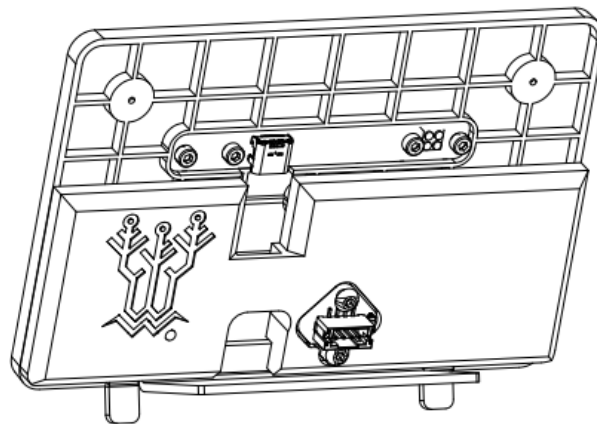
2. Then use the soldering iron to insert two additional heat-set inserts into the printed mounting bracket and secure the Panda Sense Dock using M3X5 button head cap screws.



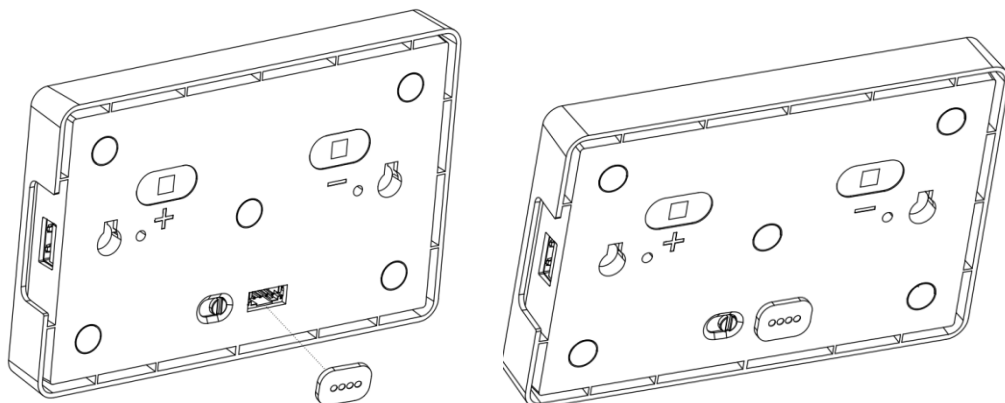
3. Attach the printed mounting bracket with the Panda Sense Dock onto the Panda Touch USB Dock.



See the completed installation image below:



4. Plug the Panda Sense Touch to the reserved I2C port on the back of your Panda Touch.



5. Plug the connecting cable into the Panda Sense Dock connector. Once the Panda Touch is magnetically attached to the Panda Touch USB Dock, the Panda Sense will function as expected.



3. Monitor the Temperature and Humidity from Panda Touch



Printer Standby Interface



Printing Interface



Axis Movement Interface

If you need further resources for this product, you can find them at [GitHub](<https://github.com/bigtreetech/>). If you cannot find what you need, you may contact our after-sales support(service005@biqu3d.com).

If you encounter any other problems during use or have suggestions or feedback, please contact us. Thank you for choosing BIGTREETECH products.