



1. P1 probe wire
2. P1 probe wire (same color as 1)
3. P2 probe wire
4. NC
5. V+ power supply (alternative to micro-USB)
6. G1 dry contact 1
7. G2 dry contact 2
8. GND dry contact common, supply ground/negative
9. RESET
10. SETUP
11. Connection Status LED

- Wi-Fi (IEEE 802.11 b/g/n) Internet Connection
 - Temperature measurement in the range -50°C to 200°C with PT-100 probe
 - Temperature and Relative Humidity measurement at device location
 - Power supply through micro-USB cable or DC power supply unit
 - RESET and SETUP button
 - Easy installation
 - Up to 2 dry contact inputs (for door sensing and more)
- Warranty: 2 years**



SETUP INSTRUCTIONS

In order for the device to work, you will need a **Wi-Fi router** with an internet connection. You will also need a smartphone with **Android** or **iOS** for the setup procedure.

1. Make the connections like shown in the diagram on page 1.
2. Check your wiring and turn on the power supply or connect the micro-USB cable
3. Open the smartphone app. If you don't already have an account, create one.
4. In the **Android** or **iOS** app , choose the **Setup Device (+)** option and follow the instructions there.
5. Check the device is connected to the router and the internet by looking at the **green LED**. If the device is connected to the HAM platform, the **green LED** should be lit.
6. If the previous steps were successful and the device is connected to the internet, then you will be redirected to the a screen where you can monitor your device.

*In case there is an issues on the steps 2/4/5, try pushing the **Reset** button and wait a few seconds.*

SAFETY WARNINGS

- In case you didn't connect the device correctly it may be damaged or destroyed. Recheck your connections before restoring power.
- Temperature, relative humidity and dry contact readings are for indicative use only and should not be relied upon when human or animal life is at risk.
- If internet connection is lost, you will not be able to monitor the real-time readings of the device nor will the readings be logged at the cloud.
- Do not take apart the device and do not use devices you have altered in any way.
- Disassembly of the device will void your warranty

USAGE

To use the device, visit <https://hamsystems.eu> or download the app for your smartphone.

For **Android**: <https://play.google.com/store/apps/details?id=com.ham.app>

For **iOS**: <https://itunes.apple.com/us/app/ham-systems/id1262469559>

Pressing the **RESET** will restart your device (your settings will be preserved).

Some of our cloud platform features:

- Monitor and log temperature with high

resolution

- Setup alerts when a dry contact changes state, e.g. a door opens
- Setup alerts when temperature is out of the desired range via SMS, e-mail, phonecalls and push notifications
- Create interactions between devices in an If-This-Then-Than (IFTTT) format.
- Share device usage with other users.
- Secured communications with TLS.
- Organize devices in groups and floor-plans.

TECHNICAL SPECIFICATIONS

Sensors	Pt100 3-wire for external temperature measurement Internal for temperature and humidity measurement
Resolution	Temperature 0.1°C, Humidity 0.1%
Setting range	Pt100: -50°C $\mu\epsilon$ +200°C Internal: -10°C to +50°C and 0%-90% RH
Accuracy	Temperature $\pm 1^\circ\text{C}$, Humidity $\pm 5\%$
Working environment	-10°C to +50°C, 5%-90% RH
Number of dry contacts	2
Power supply	5-12 VDC, 0.2 A
Dimensions	21.5 mm x 44.1 mm x 55 mm
Case	ABS

TROUBLESHOOTING

The green LED does not turn on and the device is reported as disconnected on the internet platform

If the green LED is not lit, then the device may be unable to be connected to the Internet Platform.

- Check your internet connection. If you don't seem to be able to access the internet through the Wi-Fi router then contact your Internet Service Provider (ISP).
- Check that the server is accessible at <https://hamsystems.eu> or open the smartphone app. If you are unable to access the server, try again after 5 minutes.
- Try to reset the device by using the reset button and wait a few seconds. Repeat a few times.
- Check that the device is connected to your Wi-Fi router. A way this can be achieved is by accessing the router's configuration page. If none of the above suggestions worked, then repeat the steps 2-5 of the setup instructions.

The temperature measurement is way off

- Check that you have connected the PT-100 probe correctly and that there is a good connection between the wires and the terminals
- Check that the PT-100 probe is not damaged or cut.
- Check that your device is connected and the connected status LED is fully lit.

No dry contact reading

- Check your dry contact connections.
- Check that the wires used are not cut at any point.
- Check that your device is connected and the connected status LED is fully lit
- You may need to cycle the dry contact once for it to appear on the app/ website

More in-depth documentation, help, declarations of conformity, instructions for the Internet platform, Terms and Conditions, Privacy policy and more are available at <https://hamsystems.eu>