RME Sensors

IP Thermometer Basic

User Manual

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About device

Introducing our IP Thermometer Basic, an intelligent solution for precise temperature monitoring. This advanced device seamlessly integrates with IFTTT, Home Assistant, ZABBIX, PRTG, and other systems, ensuring compatibility with your preferred setups. Featuring a user-friendly design, it incorporates an internal web server for seamless data viewing and configuration. Retrieve data with ease through simple requests or let the device autonomously push information to servers, ensuring real-time insights. Versatile and adaptable, it's ideal for server rooms, homes, offices, or any space requiring temperature monitoring. Experience the perfect blend of simplicity and reliability as our device effortlessly integrates into diverse systems, providing unparalleled ease of use for comprehensive environmental control.

Home	Config	Help		IP Thermometer Basic

T Min: 18.5°C   T Max: 24.9°C

Current temperature

23.9°C

www.ipthermometer.eu

Key Features of the IP Thermometer Basic

- Highly accurate [DS18B20](#) sensor with digital output.

- Measures temperatures from -55°C to +125°C. Fahrenheit equivalent is -67°F to +257°F

- ±0.5°C accuracy from -10°C to +85°C

- Compatible with IFTTT, Home Assistant, ZABBIX, PRTG Network Monitor, and other software for seamless integration.[1]

- Complete solution with no soldering or additional parts required (except for USB power supply).

- Internal web server with password-protected configuration for easy viewing and setup.

- Supports both DHCP and Static IP (DHCP by default).

- Provides Min-Max readings for temperature.

- Fahrenheit/Celsius selectable for user preference.

- Effortless integration with other software for a smooth monitoring experience.

- Comes with a convenient 1m probe cable.

- Operates independently of external services like Sonoff, ensuring functionality in a local network without internet dependency.

Options for retrieving data from the IP Thermometer Basic

Web Page

Simply input the device's IP address into your web browser to access a user-friendly interface. From here, effortlessly view data on the website and customize device settings, including IP and password, with optimized compatibility for both desktop and mobile devices.

JSON

Retrieve JSON data from http://[device_IP]/prtg to obtain temperature readings. The information is easily parseable and can be utilized for diverse purposes. PRTG directly supports this JSON format.

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1 IP Thermometer Basic is fully compatible with IFTTT, but please note that we cannot guarantee or take responsibility if the service provider decides to change the API or discontinue the service, making the IP Thermometer Basic no longer compatible with IFTTT. As far as we know, IFTTT has no such plans.

HTTP GET

Execute a simple HTTP GET request to http://[device_ip]/t for temperature data. Receive plain numerical values without the need for parsing, ensuring easy integration.

Send Data to Remote Server

Transmit data from the device to a remote server via HTTP GET requests. Temperature data are integrated into the request as parameters. Data can be sent at intervals you define or when readings exceed the range specified in the device configuration. IP Thermometer Basic supports IFTTT service via webhooks, empowering you to automate actions such as sending emails at predetermined intervals or when data reaches specific thresholds. Please note that HTTPS is not supported. For a detailed guide on IFTTT configuration, refer to our video at www.ipthermometer.eu

Connect to your IP Thermometer Basic

Connect device to your LAN network using standard network cable and use the included mini USB cable to connect the device to the USB power supply. As power supply can be used PC, server USB port or phone charger.

DHCP

If your network router supports the DHCP protocol, the device will automatically obtain an IP address. To identify the assigned address for the sensor, you can check your router's admin panel or utilize a network scanner. For Windows, you can use www.advanced-ip-scanner.com, a free and effective tool. Simply download, install, and click "Scan". The device name is IP-Thermometer-xx, and beside it is the sensor's IP address. Once you have the address, proceed to the next section, "WEB Interface."
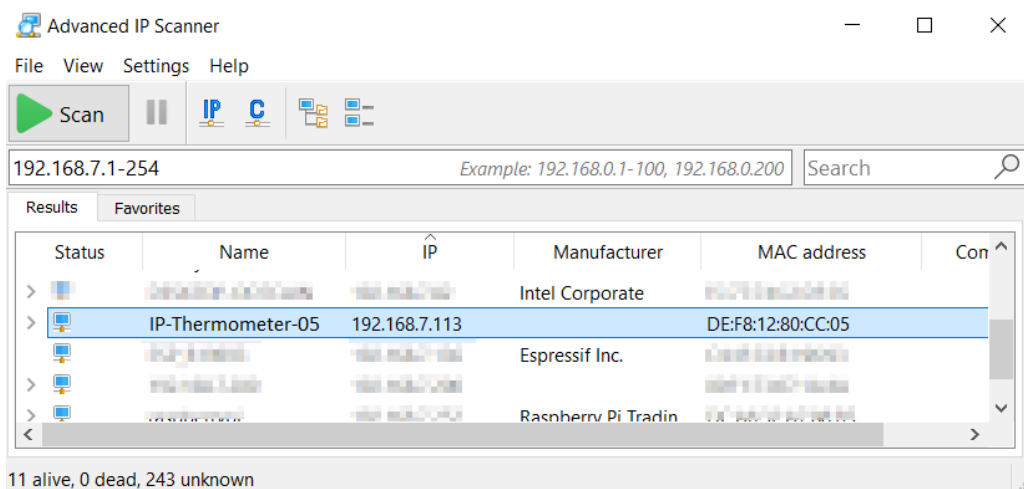
Static IP

If your LAN lacks a DHCP server, the thermometer will autonomously assign a static IP address within 1-2 minutes. The default static IP address is 192.168.7.123. To access the thermometer, ensure your computer, or other device you use to access thermometer is on the same network segment. Adjust your devices's IP address as follows: IP: 192.168.7.1 MASK: 255.255.255.0

Changing the PC's, Mac, or Android IP address varies depending on the operating system and its version. For guidance, please search on Google or YouTube, where numerous tutorials are available. Alternatively, you can contact us at www.ipthermometer.eu.
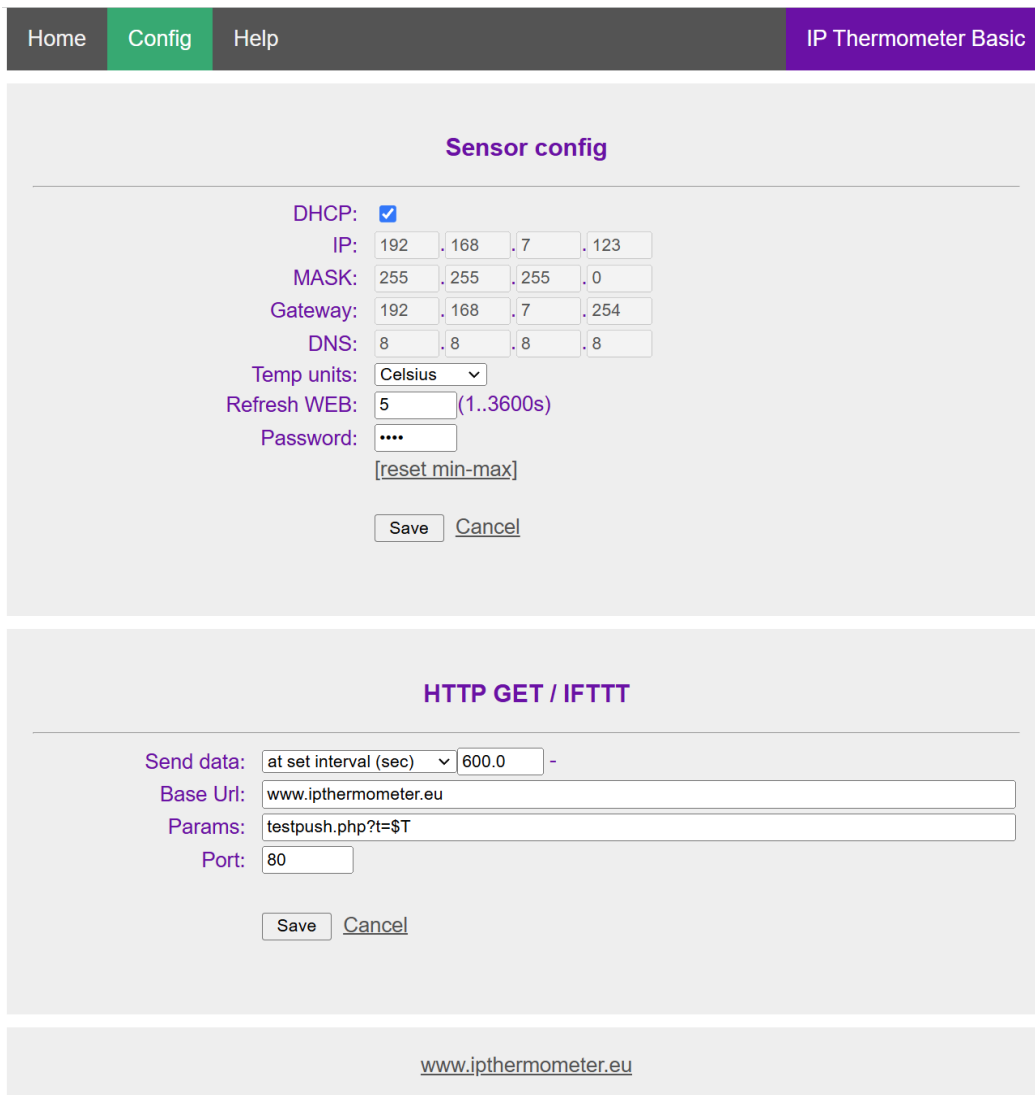
WEB Interface

Once you have the sensor's IP, simply enter it into your favorite web browser, whether on a PC or mobile device. You will see a user-friendly web interface as shown in the image below. This interface is thoughtfully designed for smooth navigation on both desktop and mobile devices with a lightweight and minimalistic design.

Home	Config	Help		IP Thermometer Basic

T Min: 18.5°C   T Max: 24.9°C

Current temperature

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www.ipthermometer.eu
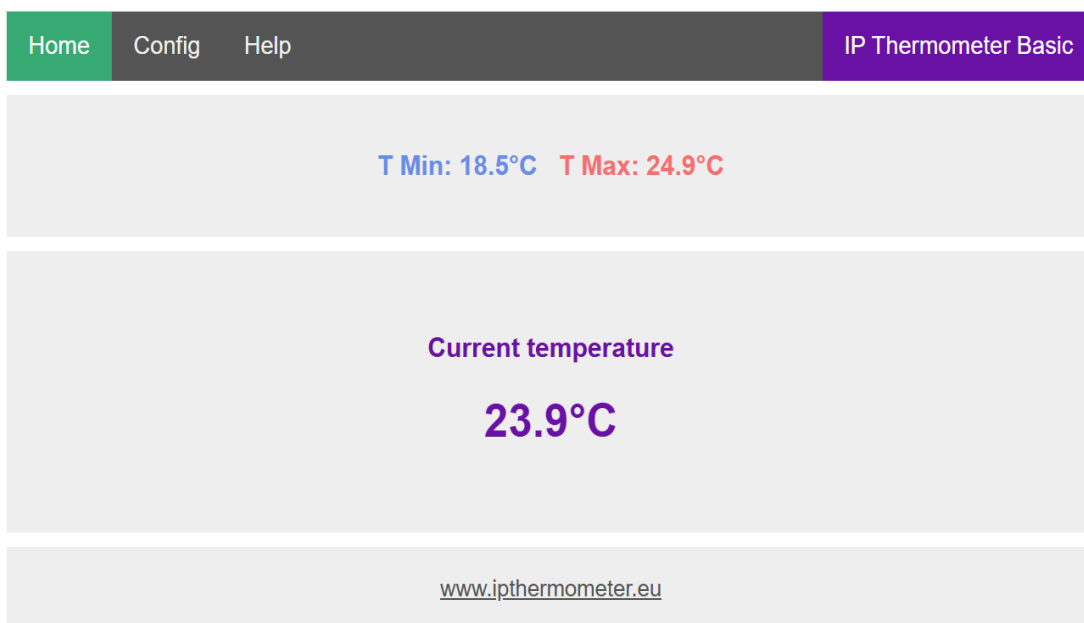
Here, you can view real-time temperature values, along with the corresponding minimum and maximum values. The Min-Max values are reset when the device is restarted, the configuration is modified and saved, or "[reset min-max] is selected in the configuration menu. The web interface automatically refreshes at predefined intervals set in the configuration menu, default value is 5 seconds.

Device configuration

Select the **Config** menu in the web interface, enter password (default is: 1234) and you should see the device configuration, which consists of two parts, **Sensor Config** and **HTTP GET / IFTTT,** like in picture below:

| Home | Config | Help | | IP Thermometer Basic |

Sensor config

DHCP: ☑
IP: 192 . 168 . 7 . 123
MASK: 255 . 255 . 255 . 0
Gateway: 192 . 168 . 7 . 254
DNS: 8 . 8 . 8 . 8
Temp units: Celsius
Refresh WEB: 5 (1..3600s)
Password: ••••
[reset min-max]

Save Cancel

HTTP GET / IFTTT

Send data: at set interval (sec) 600.0 -
Base Url: www.ipthermometer.eu
Params: testpush.php?t=$T
Port: 80

Save Cancel

www.ipthermometer.eu

Sensor config

This section allows you to set the device's IP address, choose temperature units (C/F), specify the web refresh interval, and set a password.

HTTP GET / IFTTT

This section lets you configure how data is sent to a remote server, configure IFTTT or similar service.

- **Send data**: choose when data should be sent to the server: either at set intervals or when temperature exceeds the configured range. If "**at set interval**" is chosen, enter the interval in seconds in the field on the right. If "**when T out of interval**" is selected, you will see two fields to enter the temperature range (from - to). When the temperature falls outside this range, the data will be sent to the server once. If the temperature returns to the range and goes out again, the data will be sent again.

- **Base Url:** enter your server's domain name or IP address without any slash symbols, as shown in the picture above. Please note that HTTPS is not supported.

- **Params:** enter the second part of your server URL that contains parameters. Instead of symbol **$T**, the temperature will be inserted automatically.

- **Port:** specify your server's port number.

Restore factory settings

If you are unable to connect to the device, forget the password, or if the device becomes unresponsive, please press the reset button for 5 seconds while the device is connected to the power supply.

Reset button

Integration with other software

URL to get temperature: http://device_IP/t

Java

```
URL url = new URL("http://device_IP/t");
URLConnection yc = url.openConnection();
BufferedReader in = new BufferedReader(new InputStreamReader(yc.getInputStream()));
String inputLine;
while ((inputLine = in.readLine()) != null) {
      System.out.println(inputLine);

}
in.close();
```

GO

```
package main

import (
      "fmt"
      "net/http"
      "io"
)

func main() {
      url := "http://device_IP/t"
      fmt.Println(url)
      var client http.Client
      resp, err := client.Get(url)
      if err != nil {
            fmt.Println(err)
      }
      defer resp.Body.Close()

      if resp.StatusCode == http.StatusOK {
            bodyBytes, err := io.ReadAll(resp.Body)
            if err != nil {
                fmt.Println(err)
            }
            sensorData := string(bodyBytes)
            fmt.Println(sensorData)
      }
}
```

PHP

```php
<?php

      $url = 'http://device_IP/t';
      $temp = file_get_contents($url);
      echo($temp);
?>
```

Python

```python
import urllib2
response = urllib2.urlopen('http://device_IP/t')
temp = response.read()
```
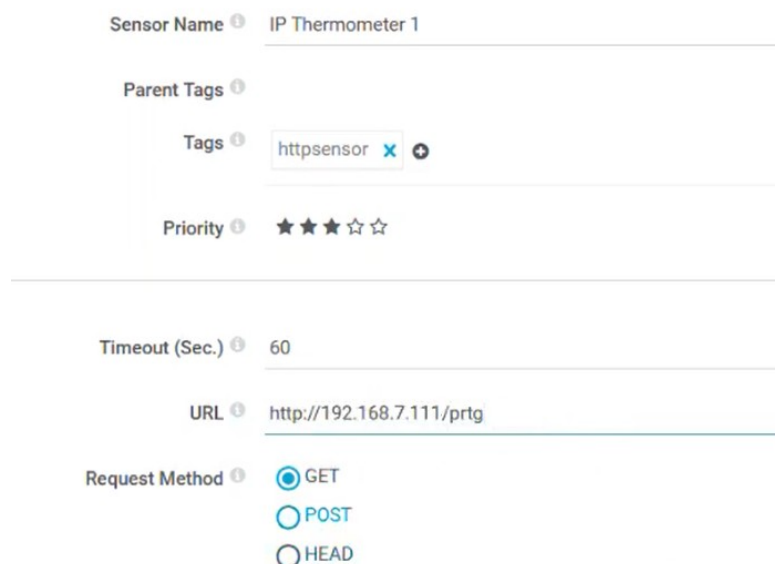
CURL

```
curl device_IP/t
```

PRTG Network monitor

To integrate this sensor with PRTG, configure the sensor type as "**HTTP Data Advanced**" and set the URL to "http://[device_IP]/prtg".

Go to **Add Sensor… -> HTTP Data Advanced** and fill form like this:

You can refer to a video tutorial available at www.ipthermometer.eu for additional guidance.

ZABBIX

To integrate this sensor with ZABBIX go to **Configuration→Hosts->Items->Create item** and fill the form like this:

Tmperature

* Name	IP TH Sensor T	
Type	HTTP agent ⌄	
* Key	t	Select
* URL	192.168.7.201/t	Parse
Query fields	Name	Value
	Add	
Request type	GET ⌄	
Type of information	Numeric (float) ⌄	

You can refer to a video tutorial available at www.ipthermometer.eu for additional guidance.

IFTTT

1. Access your IFTTT account by logging in.

2. Click on the "Create" button to create a new applet.

3. In the "If This" section, click on "Add" to set up the trigger.

4. Search for the "Webhooks" service, select it, and opt for "Receive web request".

5. Enter a name for the event.

6. In the "Then That" section, select an action for what you want to do after receiving the data. You can send email or perform other tasks.

You can refer to a video tutorial available at www.ipthermometer.eu for additional guidance.

Home Assistant

1. Add the following code snippet to your configuration.yaml file:

```
rest:
  scan_interval: 10
  resource: http://your_thermometer_ip/t
  sensor:
    - name: "IP Thermometer"
```

2. Reload your Home Assistant configuration to apply the changes.

Once added, the thermometer will appear as a sensor in your list of entities. You can now use it in your dashboard cards, automations, or wherever you need the temperature data.

To help you get started, we've set up a demo device online. You can try it with your system:

Device main screen: http://ipthermometer.eu:8888/
Temperature data URL: http://ipthermometer.eu:8888/t

Troubleshooting

The device reboots periodically, becomes inaccessible or restores factory settings

The problem is usually related to a poor quality power source or USB power cable. Please replace the power supply and USB cable. If the problem persists, please contact us.