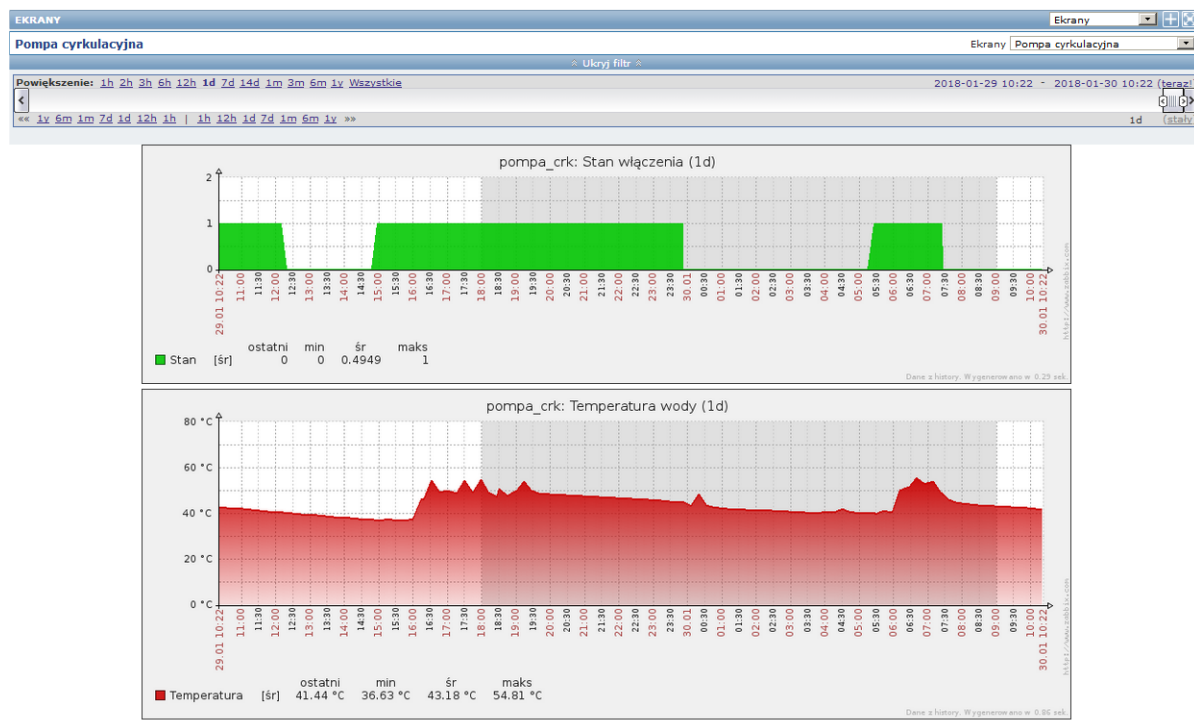


# Firmware for Sonoff devices in the Zabbix server version

## 1. Zabbix

- Zabbix is an open source solution of the enterprise class designed to monitoring of the computer systems, electronic devices and other devices which parameters are measurable
- Zabbix uses a flexible alert mechanism which allows users to configure e-mail (or SMS) messages for practically any event so it is possible to react very quickly on appearing problem. It is possible to execute any script in accordance to appearing events ( e.g. to control of the heaters or a fire depending on a current temperature, etc)
- Zabbix offers excellent reporting and graphical presentation of the collected data option. It allows to make use of any pictures as a background of the current measurement visualization
- Managing of the Zabbix server is accessible from an user interface level based on www website. This kind of user interface ensures that information about a network or server status is available from any place where is it possible access to Internet.
- Zabbix is free of charge and provided on GPL General Public License licenses in version 2. It means that the source codes are distributed free of charge and it is overall available.
- Documentation: <https://www.zabbix.com/documentation/2.4/manual>
- In the attached file there is an up-to-date firmware version as well sonoff\_templates.xml file containing the patterns of the Sonoff devices ready to import to the Zabbix system.
- One sample of a screen with the graphs presenting switch off/on state and temperature value controlled by Sonoff-th 16:



## 2. Sonoff

The software of the Sonoff controllers ( in version for SUPLA server) has been modified for an additional functionality of sending information about itself state to the given Zabbix server .

It is currently available for devices:

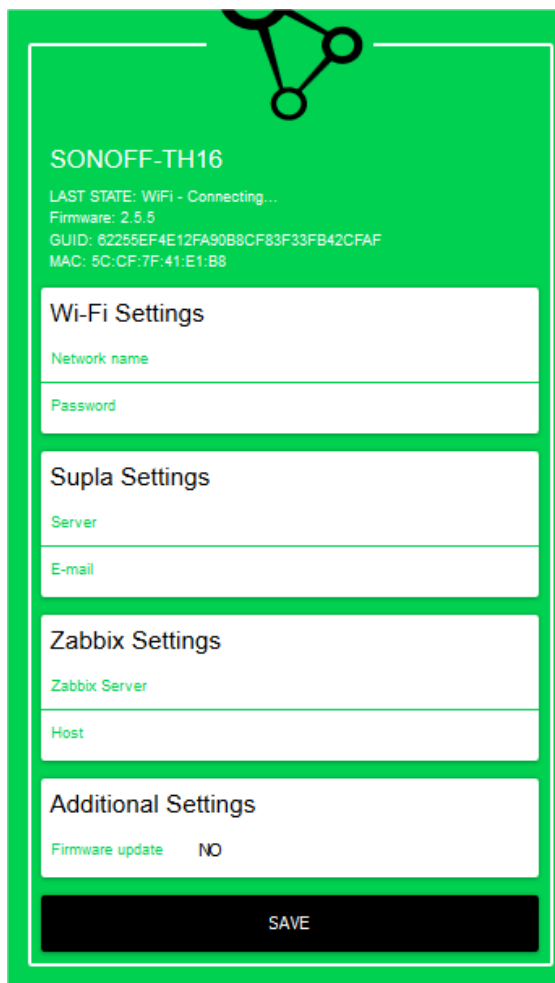
- Sonoff-th16

The device sends to the Zabbix server a current switch state ( 0-off, 1-on) and the current values of the measured temperature and humidity. Data are sent approximately every 15 minute and after each change of the switch state.

## 3. Installation

After downloading of the firmware to the Sonoff device it gives its SSID named „SUPLA-ESP8266-.....” to its local network as a router WI-FI.

One should connect to the given WI-FI network without password and then open in an internet explorer the website available at the address : <http://192.168.4.1>



The image shows a web interface for a Sonoff-TH16 device. At the top, there is a logo consisting of three connected circles. Below the logo, the device name "SONOFF-TH16" is displayed. Underneath, the status "LAST STATE: WiFi - Connecting..." is shown, followed by "Firmware: 2.5.5", "GUID: 62255EF4E12FA90B8CF83F33FB42CFAF", and "MAC: 5C:CF:7F:41:E1:B8". The interface is divided into four main sections: "Wi-Fi Settings", "Supla Settings", "Zabbix Settings", and "Additional Settings". Each section contains input fields for configuration. At the bottom, there is a large black button labeled "SAVE".

SONOFF-TH16	
LAST STATE: WiFi - Connecting...	
Firmware: 2.5.5	
GUID: 62255EF4E12FA90B8CF83F33FB42CFAF	
MAC: 5C:CF:7F:41:E1:B8	
Wi-Fi Settings	
Network name	
Password	
Supla Settings	
Server	
E-mail	
Zabbix Settings	
Zabbix Server	
Host	
Additional Settings	
Firmware update	NO
SAVE	

**One should enter:**

- parameters of the Wi-Fi network to which Sonoff will be connect ( mandatory param.)
- Supla server address ( mandatory param.)
- Zabbix server address( domain address) ( optional param.)
- Host name, where the device is registered on the Zabbix server ( mandatory parameter if the Zabbix server address is given)

After pressing 'Save' the device should be restarted. The device should connect automatically to Wi-Fi network (at that time the blue LED will be on permanently)