

# The most innovative Wi-Fi combustible gas sensor



# USER GUIDE

# **User guide**

Shelly Gas by Allterco Robotics is intended to be placed, where combustible gas\* is used in order to detect and alarm potential gas leakages in the room/area. Shelly Gas is powered directly from the grid. Shelly may work as a standalone device or as an accessory to a home automation controller.

\* Shelly Gas comes in two variants - Shelly Gas CNG and Shelly Gas LPG. They are two separate products intended for different type of gas detection. If you are not sure about your Shelly Gas gas detection type is please check the markings on the back of the product.

# Specification

Power supply: 110-230V ±10% 50/60Hz AC

#### Gas types detected:

- Shelly GAS CNG compressed natural gas
- Shelly Gas LPG liquefied petroleum gas

#### Complies with EU standards:

- RE Directive 2014/53/EU
- · LVD 2014/35/EU
- EMC 2004/108/WE
- RoHS2 2011/65/UE

Working temperature: 0° ÷ 40 °C Radio signal power: 1mW Radio protocol: WiFi 802.11 b/g/n Frequency: 2400 – 2500 MHz; Operational range:

- · up to 50 m outdoors
- up to 30 m indoors

Dimensions (HxWxL):

- Without plug 90x90x38 mm
- With plug 90x90x60 mm

Electrical consumption: < 1 W Alarm Sound: 70dB (at 1m)

# Wi-Fi LED states

- · STA mode with cloud connection static
- · STA mode without cloud connection static, blink each 5 sec
- · STA mode without interner connection static, blink each 3 sec
- · AP mode blink once per second

# Sound alarms

Sensor warm up starts upon power on - two short beeps per second.

- Success of sensor warming up one long beep per second
- Sensor fault long beep once per second until sensor is recovered from fault
- Device self test three short beeps twice per second
- Mild gas leak long beep once per second, until gas leakage is not present or if switching to "Heavy gas leak" mode
- Heavy gas leak The device beeps for five seconds with one second pause until gas leakage is not present
- · Successful self test long beep once per second

# Installation Instructions

ICAUTION - Before beginning the installation please read the accompanying documentation carefully and completely. Failure to follow recommended procedures could lead to maifunction, danger to your life or violation of the law. Allterco Robotics is not responsible for any loss or damage in case of incorrect installation or operation of this device.

**ICAUTION** - Use the Device only with power grid which complies with all applicable regulations. Short circuit in the power grid may damage it.

**ICAUTION** - Do not allow children to play with the device, especially with the Power Button. Keep the devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

# Initial Inclusion

Place Shelly into the power socket, in the room where you want to use it.

- For CNG gas detection the Shelly Gas CNG unit is best to be placed 0.3~1m below ceiling vertically and 1.5m away from the natural gas source.
- For LPG gas detection the Shelly Gas LPG unit is best to be placed 0.3m above floor, and within 1.5m from gas source.

The device will make a self test, and in the first 3 minutes the LED ring should turn in a sequence: green->orange->red. After the self test is finished, the LED ring should turn green and the WiFi LED should be blinking, once per second. This means that the device is calibrated and is in AP mode.

# Factory Reset

You can return your Shelly Gas to its Factory Settings by pressing and holding the reset button for 10 seconds. Upon successful factory reset the WiFi LED will blink once per second.

# Introduction to Shelly®

Shelly® is a family of innovative devices, which allow remote control of electric appliances through mobile phone, PC or home automation system. Shelly® uses WiFi to connect to the devices controlling it (mobile phones, tablets etc.). They can be in the same WiFi network or they can use remote access (through the Internet - Shelly Cloud). Shelly® has an integrated web server, through which the User may adjust, control and monitor the Device. An API can be provided by the Manufacturer. The User can register and access the Shelly Cloud, using either Android or iOS mobile applications, or any internet browser and the web site: https://my.shelly.cloud/.

# Control your home with your voice

All Shelly devices are compatible with Amazons' Alexa and Googles' assistant. Please see our step-by-step guides on: https://shelly.cloud/compatibility/Alexa https://shelly.cloud/compatibility/Assistant

# SHELLY® CLOUD MOBILE APPLICATION





# The Shelly Cloud mobile application

Shelly Cloud gives you opportunity to control and adjust all Shelly® devices from anywhere in the world. The only thing you need is connection to the Internet and our mobile application, installed on your smartphone or tablet. To install the application please visit Google Play or App Store.



# Registration

The first time you open the Shelly Cloud mobile app, you have to create an account which can manage all your Shelly® devices.

# Forgotten Password

In case you forget or lose your password, just enter the e-mail address you have used in your registration. You will then receive instructions on how to change your password.

WARNING! Be careful when you type your e-mail address during the registration, as it will be used in case you forgot your password.



After registering, create your first room (or rooms), where you are going to add and use your Shelly devices. Shelly Cloud allows easy control and monitoring using a mobile phone, tablet or PC.

# **Device Inclusion**

To add a new Shelly device, connect it to the power grid following the Installation Instructions included with the Device.

# Step 1

Place your Shelly into the power socket, in the room where you want to use it. The WiFi LED should be blinking, once per second. WARNING: If the WiFi LED is not blinking once per second, press and hold the reset button for at least 10 seconds. The WiFi LED should be blinking, once per second. If not, please repeat or contact our customer support at: support@shelly.cloud

#### Step 2

#### Choose "Add Device".

In order to add more devices later, use the Menu at the top right corner of the main screen and click "Add Device". Type the name and password for the WiFi network, to which you want to add Shelly.

# Step 3

If using **iOS**: you will see the following screen(left): On your iOS device open Settings > WiFi and connect to the WiFi network created by Shelly, e.g. ShellySmoke-35FA58.

If using **Android**: your phone will automatically scan(right) and include all new Shelly devices in the WiFi network, that you defined.



Upon successful Device Inclusion to the WiFi network you will see the following pop-up:



#### Step 4:

Approximately 30 seconds after discovery of any new devices on the local WiFi network, a list will be displayed by default in the "Discovered Devices" room.



#### Step 5:

Select Discovered Devices and choose the Shelly device you want to include in your account.



#### Step 6:

Enter a name for the Device. Choose a Room, in which the device has to be positioned. You can choose an icon or upload a picture to make it easier to recognize. Press "Save Device".



#### Step 7:

To enable connection to the Shelly Cloud service for remote control and monitoring of the Device, press "yes" on the following pop-up.



# Shelly devices settings

After your Shelly device is included in the app, you can control it, change its settings and automate the way it works.



To enter the details menu of the device, click on it's name. From there you may control the device, as well as edit its appearance and settings.

# Self Test

Sensor Self Test - Make a self-test of the device.

# Mute

Mute the device, when the alarm is on. You can not mute the device, if the alarm is not triggered.

# Internet/Security

#### WiFi Mode - Client

Allows the device to connect to an available WiFi network. After typing the details in the respective fields, press **Connect**.

#### WiFi Client Backup

Allows the device to connect to an available WiFi network, as a secondary (backup), if your primary WiFi network becomes unavailable. After typing the details in the respective fields, User guide 11

#### press Set.

#### WiFi Mode - Acess Point

Configure Shelly to create a Wi-Fi Access point. After typing the details in the respective fields, press **Create Access Point**.

#### **Restrict Login**

Restrict the web interface of Shely with a Username and Password. After typing the details in the respective fields, press **Re**strict Shelly.

# Settings

# Volume

Define the alarm volume level of the device, when the alarm is triggered. Possible range:  $1 \sim 11$ .

#### **Time Zone and Geo-location**

Enable or Disable the automatic detection of Time Zone and Geo-location.

#### **Factory Reset**

Return Shelly to its factory default settings.

#### **Device Reboot**

Restart your Shelly device.

#### **Device Information**

- · Device ID Unique ID of Shelly
- · Device IP The IP of Shelly in your Wi-Fi network

## Edit Device

- Device Name
- Device Room
- Device Picture

When you are done editing press Save Device.

# THE EMBEDDED WEB INTERFACE

Even without the mobile app Shelly can be set and controlled through a browser and connection of a mobile phone or tablet.

# Abbreviations used

- Shelly-ID consists of 6 or more characters. It may include numbers and letters, for example 35FA58.
- SSID the name of the WiFi network, created by the device, for example ShellyGas-35FA58.
- Access Point (AP) in this mode in Shelly creates its own WiFi network.

• Client Mode (CM) – in thismode in Shelly connects to another WiFi network.

# Installation/Initial inclusion

#### Step 1

Place Shelly into the power socket, in the room where you want to use it. The device will make a self test, and in the first 3 minutes the LED ring should turn in a sequence: green-sorangered. After the self test is finished, the LED ring should turn green and the WiFi LED should be blinking, once per second. This means that the device is calibrated and is in AP mode.

CAUTION! If the WiFi LED is not blinking once per second, press and hold the reset button for at least 10 seconds. The WiFi LED should be blinking, once per second. If not, please repeat or contact our customer support at: support@shelly.cloud

#### Step 2

When WiFi LED is blinking once per second, Shelly has created a WiFi network, with name such as **ShellyGas-35FA58**. Connect to it.

# Step 3

Type 192.168.33.1 into the address field of your browser to User guide 13

load the web interface of Shelly.

# **General - Home Page**

This is the home page of the embedded web interface.

- Current alarm status
- Current PPM\* count
- · Connection to Cloud
- · Present time
- · Settings
- \* PPM intensity of combustible gas in the area

# Self test

Make a self-test of the device.

# Mute

Mute the device, when the alarm is on. You can not mute the device, if the alarm is not triggered.

# Internet/Security

#### WiFi Mode - Client

Allows the device to connect to an available WiFi network. After typing the details in the respective fields, press **Connect**.

#### WiFi Client Backup

Allows the device to connect to an available WiFi network, as a secondary (backup), if your primary WiFi network becomes unavailable. After typing the details in the respective fields, press Set.

#### WiFi Mode - Acess Point

Configure Shelly to create a Wi-Fi Access point. After typing the details in the respective fields, press **Create Access Point**.

#### **Restrict Login**

Restrict the web interface of Shely with a Username and Pass-

word. After typing the details in the respective fields, press **Restrict Shelly**.

#### SNTP Server

You can change the default SNTP server. Enter the address, and click **Save**.

#### Advanced - Developer Settings

Here you can change the action execution:

- Via CoAP (CoIOT)
- Via MQTT

## Cloud

You can Activate/Deactivate the connection to Shelly Cloud. ATTENTION! To reset the device, press and hold the Button for at least 10 seconds. Upon successful factory reset, Shelly will make a lond sound.

# Settings

# Time Zone and Geo-location

Enable or Disable the automatic detection of Time Zone and Geo-location. If Disabled you can define it manually.

#### Volume

Define the alarm volume level of the device, when the alarm is triggered. Possible range:  $1 \sim 11$ .

#### **Firmware Upgrade**

Shows present firmware version. If a newer version is available, you can update your Shelly by clicking Upload to install it.

#### Factory reset

Return Shelly to its factory settings.

### **Device Reboot**

Reboots the device.

User guide

#### **Device Info**

Shows your device ID. In Client Mode shows also your WiFi network name and WiFi signal strength.

# **Additional Features**

Shelly allows control via HTTP from any other device, home automation controller, mobile app or server.

For more information about the REST control protocol, please visit www.shelly.cloud or send a request to developers@shelly. cloud.