

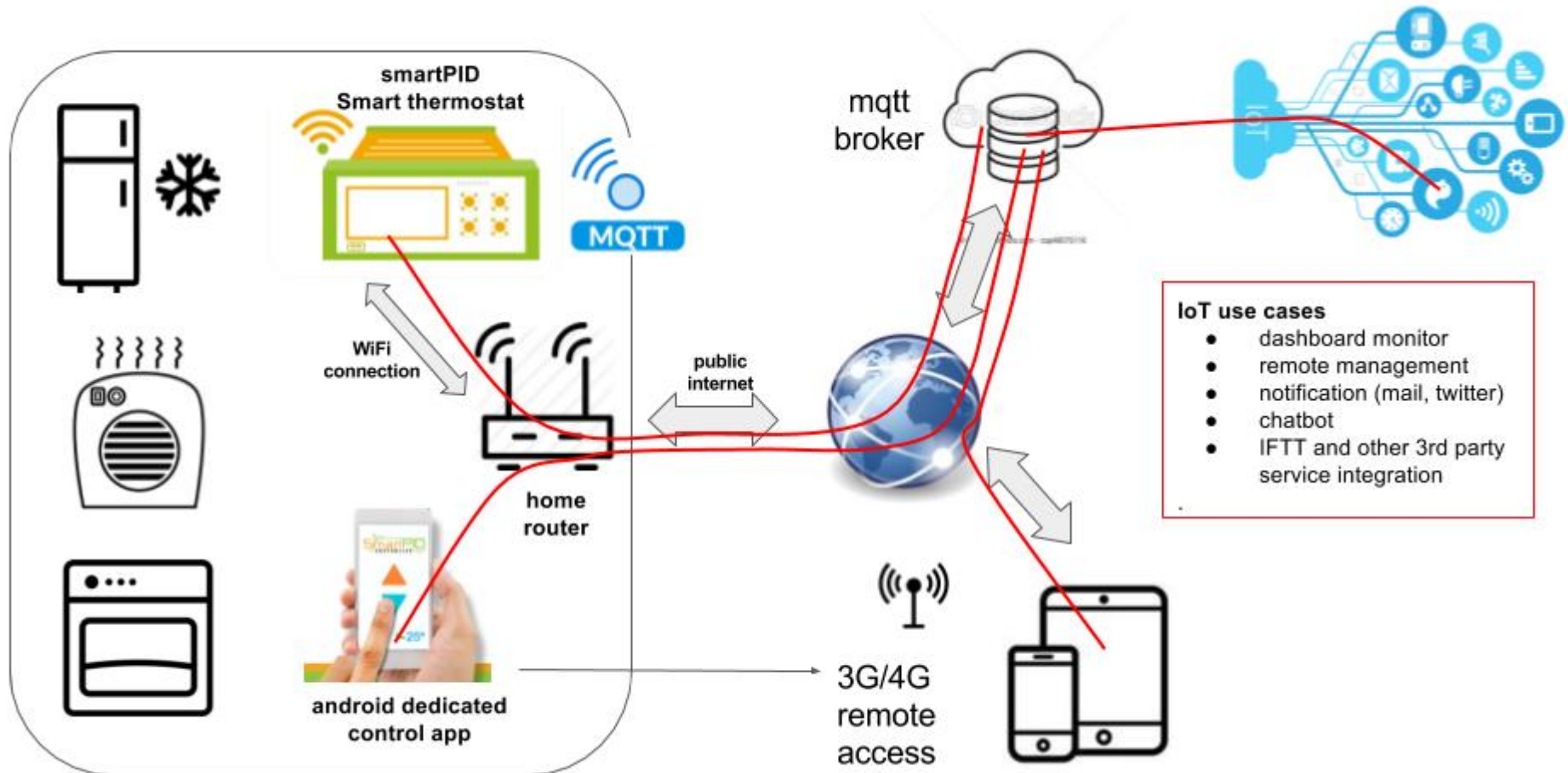
Smart Thermostat App

The image displays a physical SmartPID controller on the left with a digital display showing:
T1: 24.6°C
SP: 55.0°C
100% PID-mode
5:00+
SET
S/S
USB

In the center, a hand holds a smartphone displaying the SmartPID app interface with a temperature of 25°C and a green up arrow.

A circular diagram on the right is divided into two sections: **HEATING** (top half, orange-to-red gradient) and **COOLING** (bottom half, blue-to-cyan gradient). The HEATING section includes icons for a sun, a furnace, a boiler, and a radiator. The COOLING section includes icons for a fan, a snowflake, and a grill. A blue MQTT logo with a signal icon is positioned below the controller.

SmartPID smart thermostat MQTT server architecture



- IoT use cases**
- dashboard monitor
 - remote management
 - notification (mail, twitter)
 - chatbot
 - IFTTT and other 3rd party service integration

SmartPID smart thermostat WiFi config and remote server connection

In order to connect SmartPID controller to home WiFi network and to remote server and to the smartphone app 3 basic operation are need

SmartPID account creation (sign-up via app)



WiFi configuration and provisioning

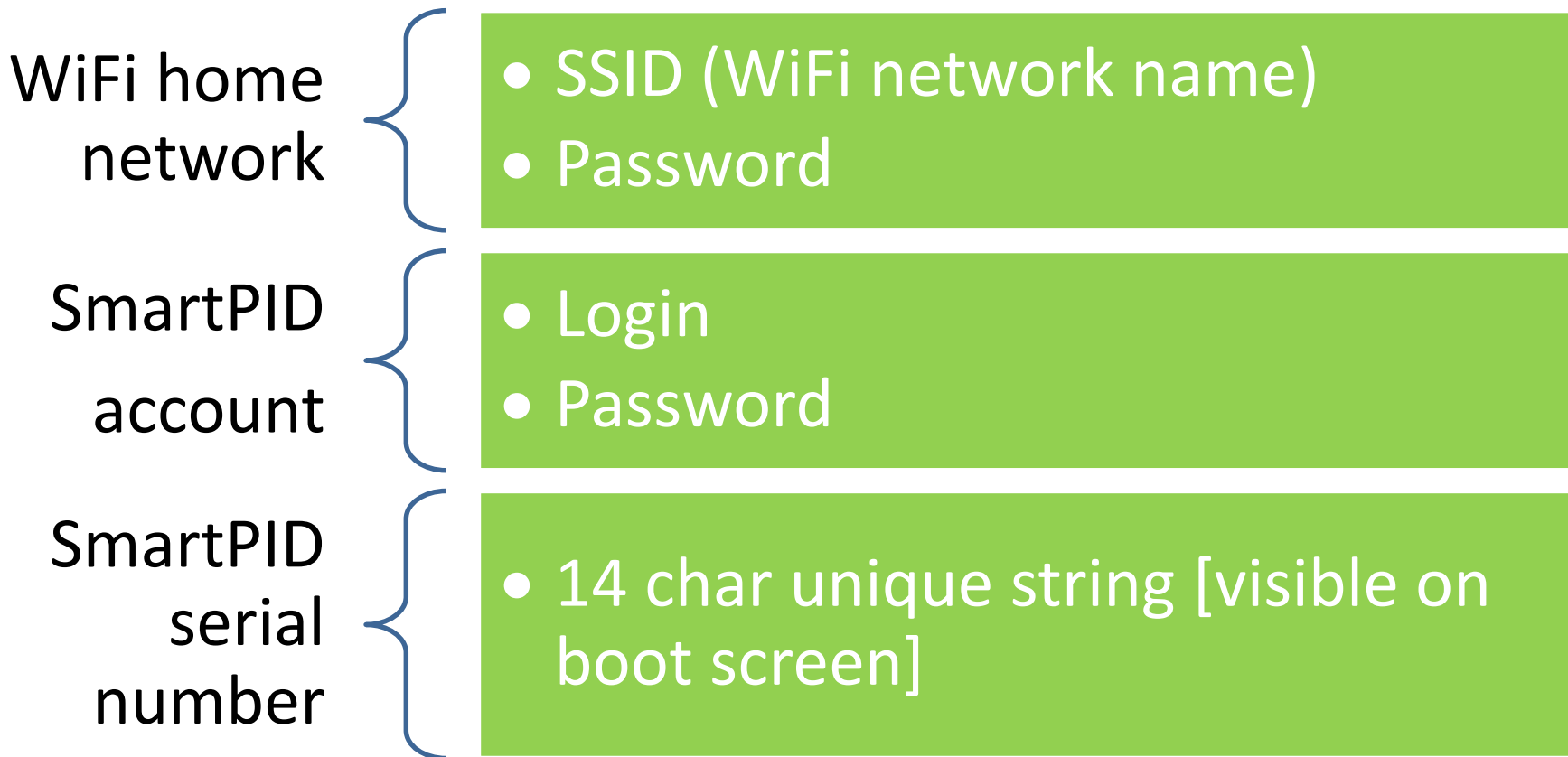


SmartPID pairing with the app using serial number

Credentials need to configure all the elements

Following data are need to complete the 3 steps

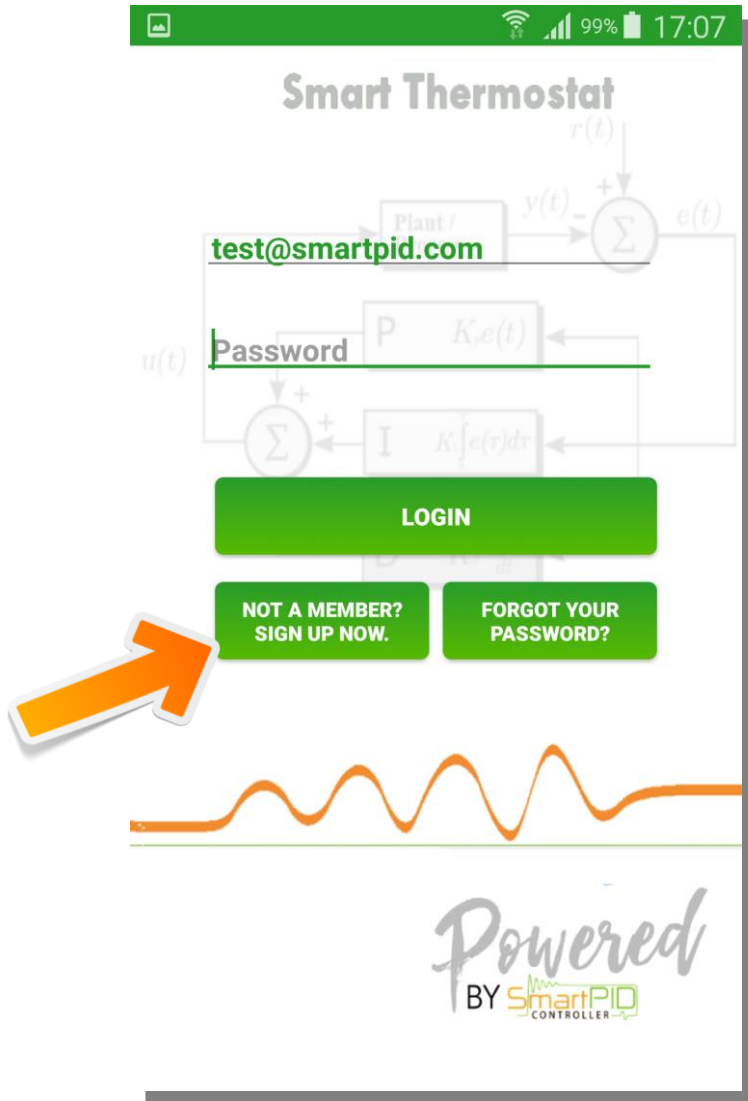
Make sure to write correctly (pay attention to capital letters, unwanted space, O and 0 etc..)





step 1

SmartPID account creation



step1.1

1. Start SmartPID smart thermostat app
2. Perform Sing-up process by pressing **NOT A MEMBER? SIGN UP NOW**



step 1.2

Smart Thermostat

test@smartpid.com

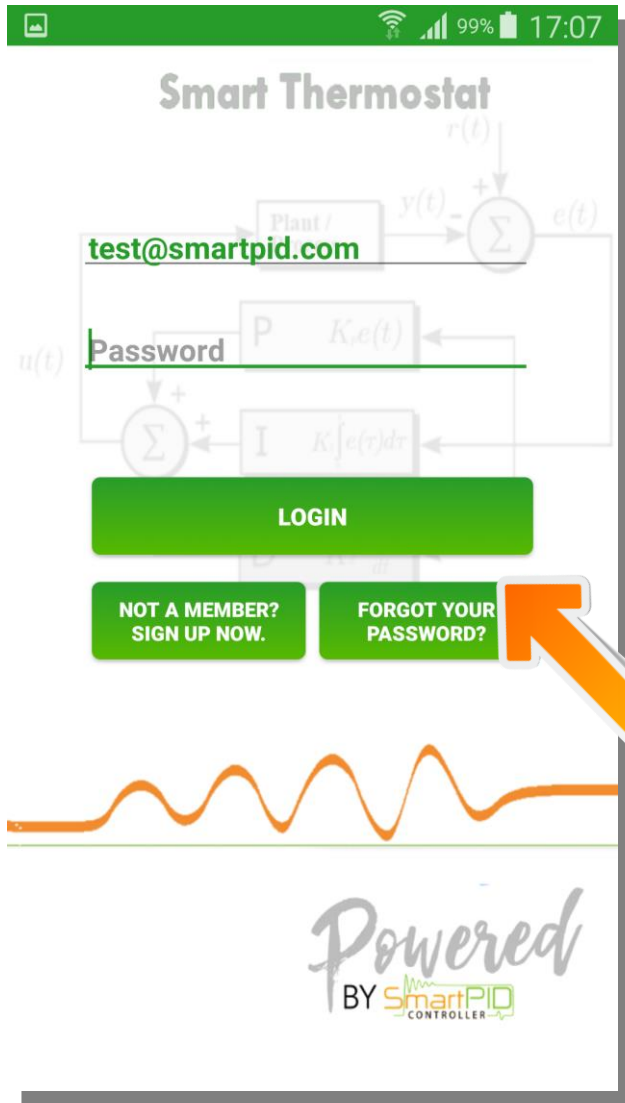
Password

REGISTER

ALREADY REGISTERED! LOGIN ME.

Powered BY SmartPID CONTROLLER

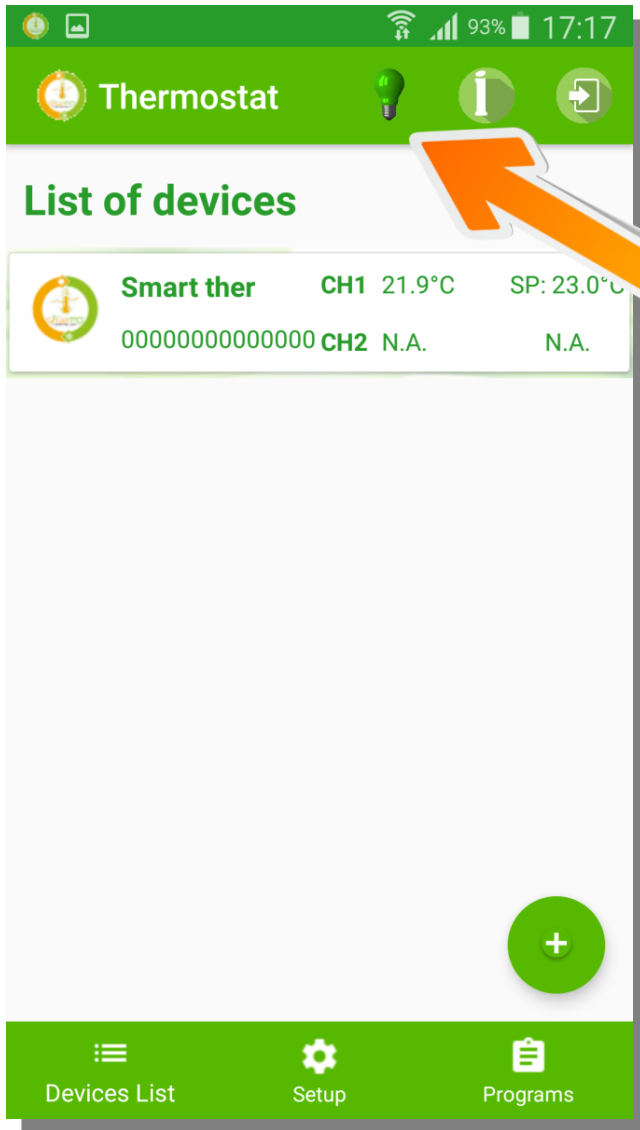
1. Insert valid email (need for recovery process)
2. Insert a personal password
3. Note the credentials for step 2



step 1.3

1. Login using credentials created
2. Press **LOGIN** to connect to the server

Powered
BY SmartPID
CONTROLLER



step 1.4

1. Verify the connection status through the green light on the top bar
2. In case of red light check again credentials and internet connectivity



step 2

SmartPID WiFi config & provisioning



step2.1

```
Connectivity/log
  Logging
  Wi-Fi
  MQTT Broker
```

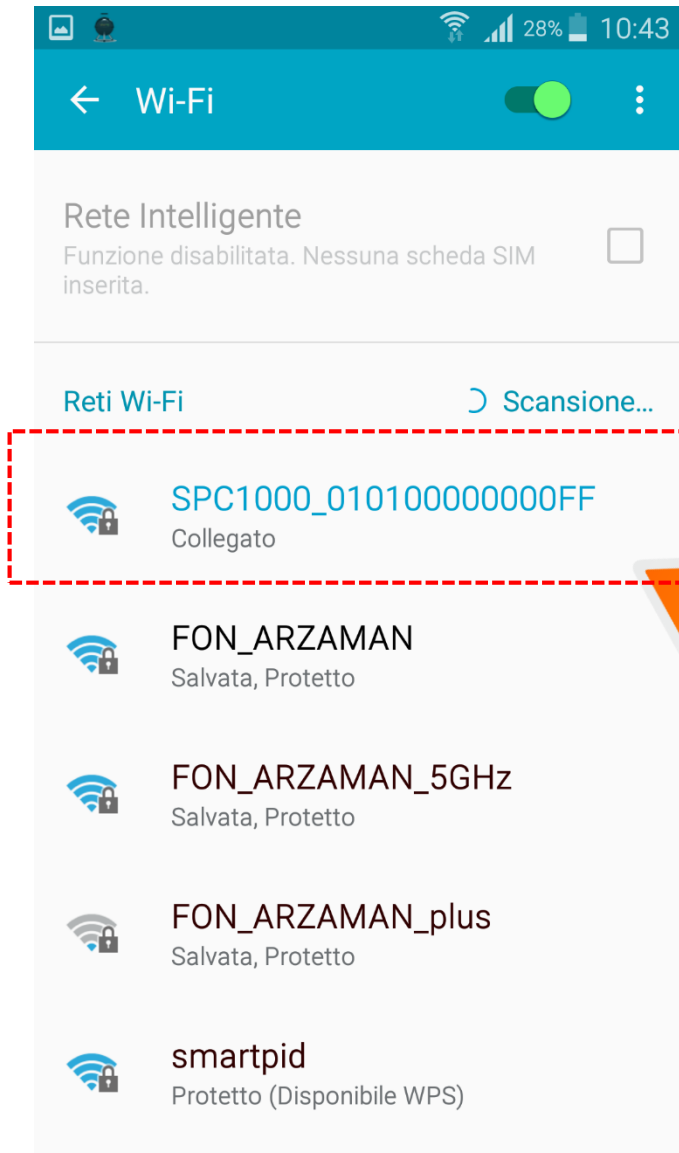
1. Navigate to configuration connectivity/log configuration menu

```
Wi-Fi
Wi-Fi M Off AP
SSID Client
Passwor AP
Server Auto 80
Status
```

1. Configure “Wi-Fi mode” in AP mode

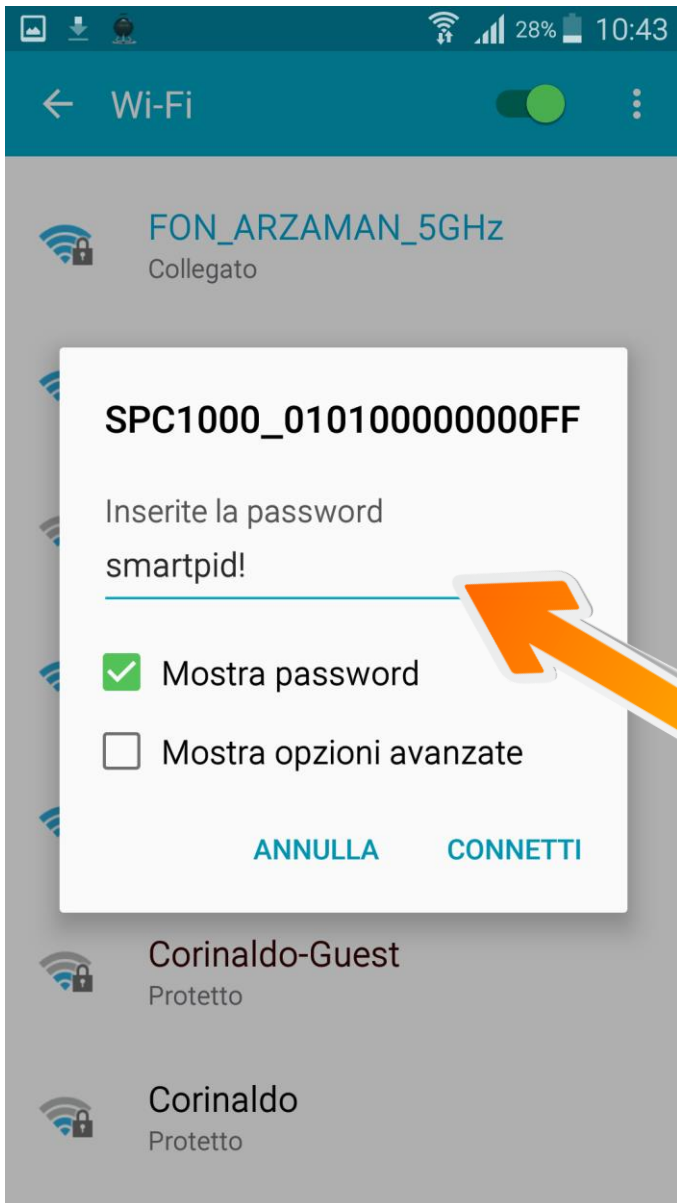


step 2.2



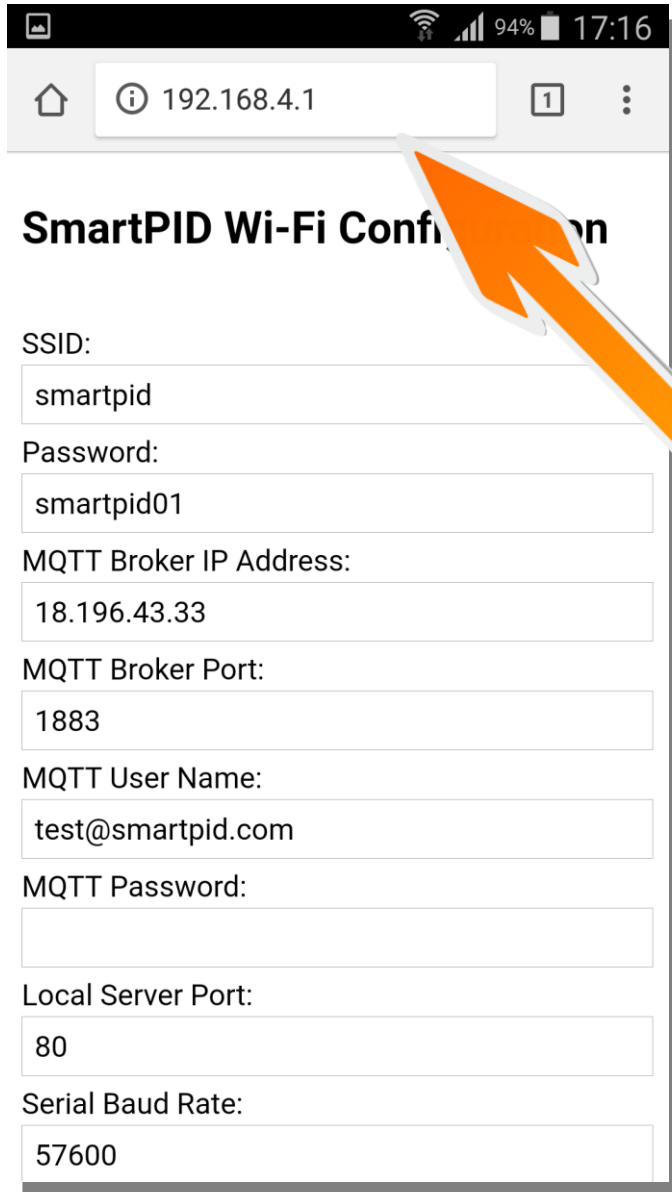
1. From smartphone , table or laptop scan the WiFi network
2. Highlight the SPC1000_XXXXXXXX
3. Select the special network and connect

NOTE it's strongly suggested to disconnect smartphone from 3g/4g connection during the whole operation



step 2.3

1. Connect to WiFi network
SPC1000_XXXXXXXXXXXXXXXXXX
2. Default password is **smartpid!**



SmartPID Wi-Fi Configuration

SSID:
smartpid

Password:
smartpid01

MQTT Broker IP Address:
18.196.43.33

MQTT Broker Port:
1883

MQTT User Name:
test@smartpid.com

MQTT Password:

Local Server Port:
80

Serial Baud Rate:
57600

The image shows a mobile browser interface with a form for configuring a SmartPID device. The address bar at the top contains the IP address 192.168.4.1, which is highlighted by a large orange arrow pointing from the right. The form fields are labeled and contain the following values: SSID (smartpid), Password (smartpid01), MQTT Broker IP Address (18.196.43.33), MQTT Broker Port (1883), MQTT User Name (test@smartpid.com), Local Server Port (80), and Serial Baud Rate (57600). The MQTT Password field is empty.



step 2.4

1. Open any browser (chrome or other)
2. Input in the address bar following address
192.168.4.1
3. You will be redirect to a landing page with a text form

SSID:

smartpid

Password:

smartpid01

MQTT Broker IP Address:

18.196.43.33

MQTT Broker Port:

1883

MQTT User Name:

test@smartpid.com

MQTT Password:

Local Server Port:

80

Serial Baud Rate:

57600

Save



step 2.5

Username e Password
WiFi home network

Server IP address and port
18.196.43.33

SmartPID account
username and PWD
Created in step 1

Save data
SmartPID will "reboot"





step 2.6

```
Wi-Fi
Wi-Fi M Off Client
SSID Client
Passwor AP
Server Auto
Status
```

```
Wi-Fi
Wi-Fi Mode Client
SSID
Password
Server Port
Status
```

```
Wi-Fi Status
Connected
IP 123.123.123.123
SSID
123456789012345678901
23456789012
```

1. Go back to SmartPID menu WiFi/MQTT
2. Configure “Wi-Fi mode” as Client
3. Verify SSID e PWD of your home WiFi network
4. Verify “connected” connected status and assignment from your home router of a valid IP address



step 2.7

```
MQTT Broker-----
IP      160.153.225.184
Port    1883
User Name
Password
Client Id
```

```
Logging-----
Log Mo  OFF      WiFi
Sample  WiFi      5
Status  USB
        WiFi+USB
```

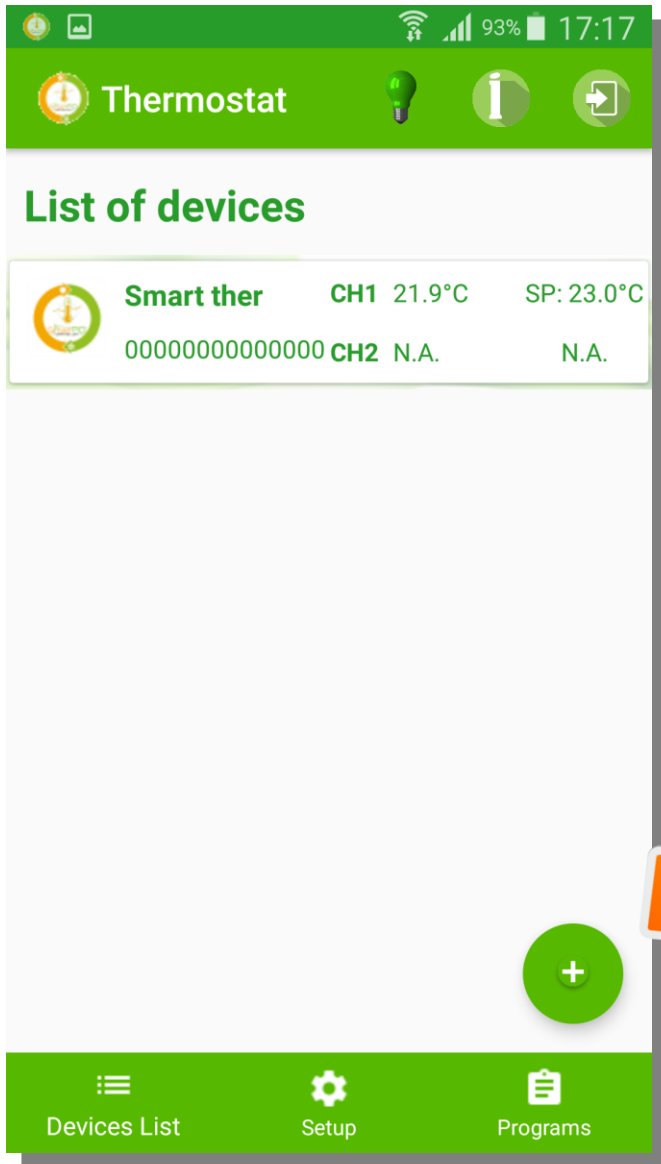
```
Logging Status-----
EEPROM Mem      Empty
MQTT Connection  OK
```

1. Go to MQTT broker configuration menu and verify the credentials stored
2. Go logging menu and configure "Log Mode" via WiFi
3. Configure logging interval (Min Sample Time 5s)
4. Verify MQTT connections status



step 3

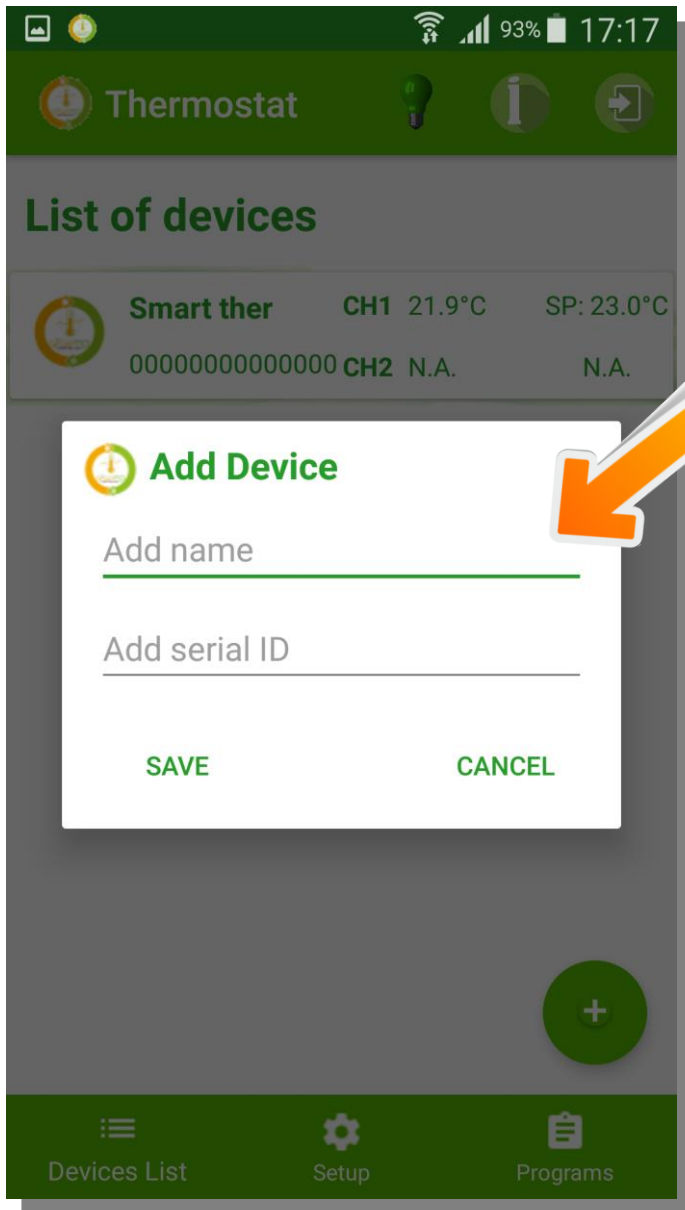
SmartPID pairing with the app via
serial number



step 3.1

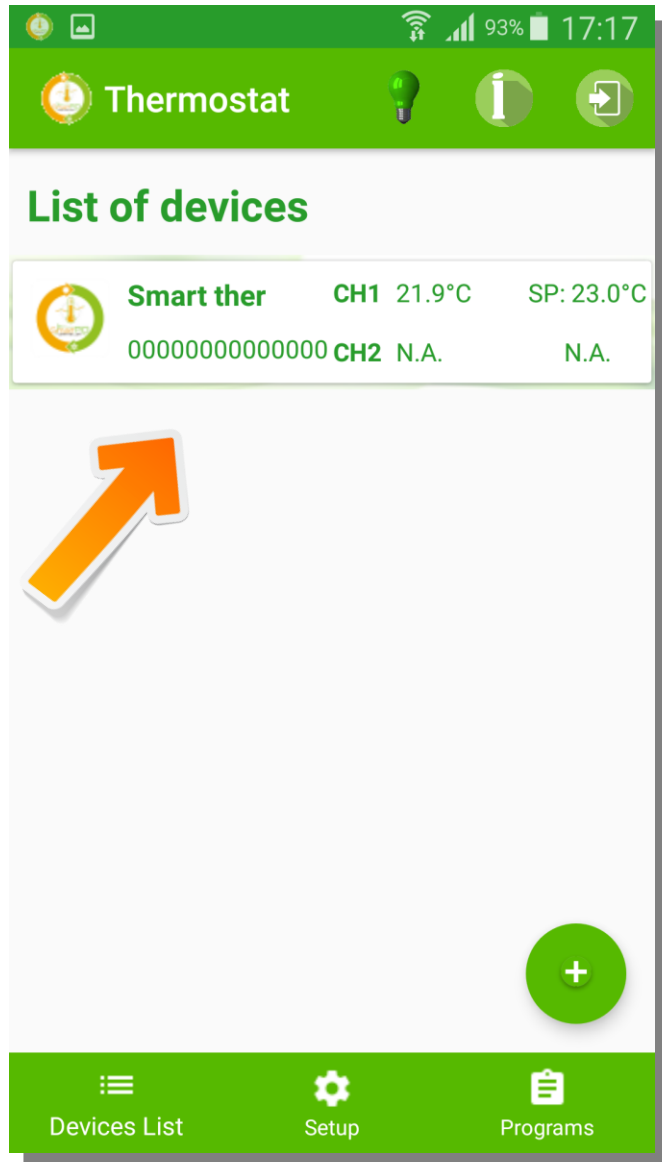
1. You can add any number of remote controlled smartPID adding to your device list.
2. Press button to add a new one





step 3.2

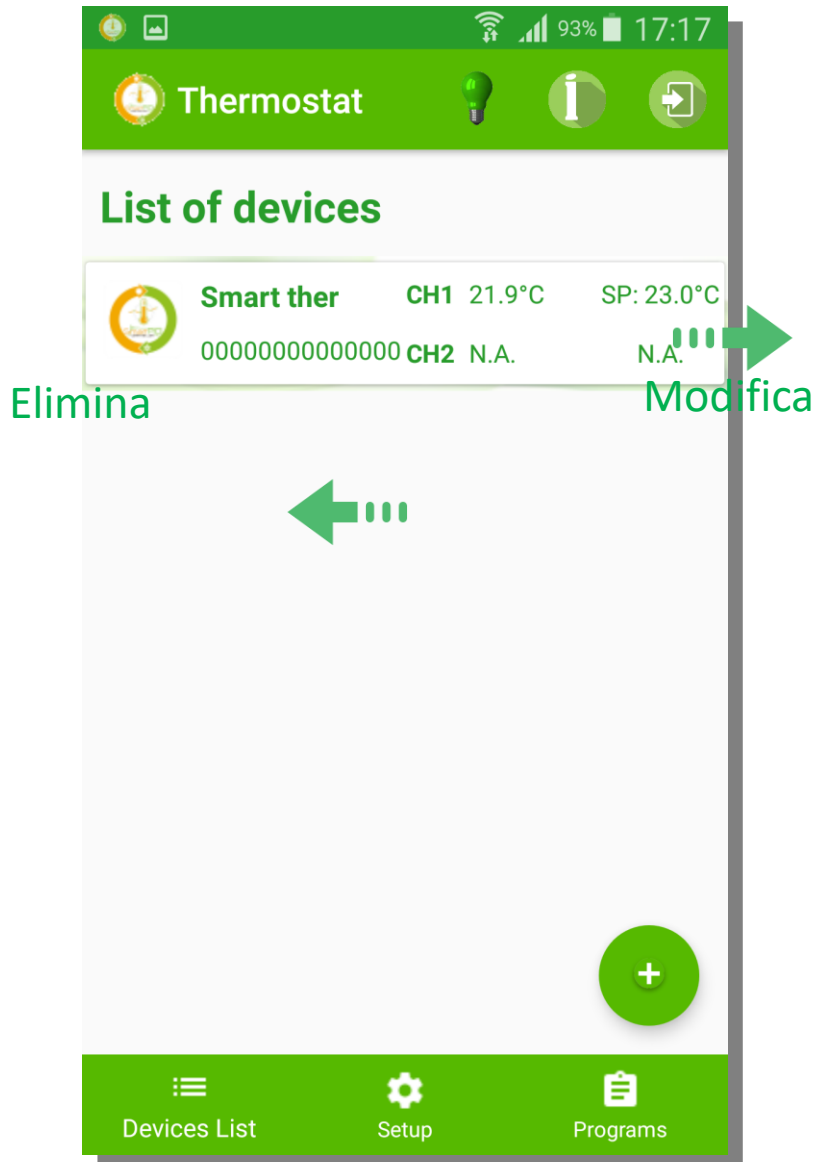
1. Insert a mnemonic name
2. Insert serial number string that is displayed during boot sequence (14 chars)
3. Press **SAVE**



step 3.3

1. The new smartPID controller has been added

step 3.4



1. It's possible to remove a device sliding left
2. It's possible to modify information sliding right