MURAQEB - مُراقب

Temperature & Humidity Monitoring

Thermal (Pro)

AFKAR Digital
µ-Integration - Automation
Control - Internet of Things

Product Description

Thank you for buying our product MURAQEB-Thermal Pro.

MURAQEB-Thermal Pro consists of a Main Unit and Wireless Sensors. The Main Unit collects Temperature & Humidity measurements from the surrounding Wireless Sensors and uploads them to the cloud. There is no local storage for MURAQEB-Thermal Pro, the local storage feature is available for MURAQEB-Thermal Advanced.

MURAQEB connects to the internet via WIFI.

MURAQEB can be monitored via your PC/mobile from local network or over the Internet.

MURAQEB Pro can issue alerts for high/low Temperature & Humidity and can send them over emails as per your preferred settings (SMS Messages & Phone Calls are only for MURAQEB Advanced).

MURAQEB can present measurements in Excel format and graphs.

MURAQEB uses Sensors with Long-Range Bluetooth Technology which can reach ~100m in an open space. Sensor battery lifetime 18~24 months replaced by standard batteries.

The accuracy of the Sensors is unbeatable, ±0.2°C (T) / ±2 (%H).

Warranty

- Product warranty: 2 years.
- This product is warranted to be free of defects in material and workmanship during the warranty period starting from the date of purchase.
- This warranty does not extend to any defect, malfunction or failure caused by the below. In such cases, AFKAR DIGITAL shall not be liable for any replacement or any compensation caused by the incompliance or misuse of the device:
  - o The misuse which is not complying with the Safe Operating Instructions.
  - o Malfunction related to over-voltage/instability of the AC Electricity.

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Safe Operation Instructions

Please read the Instructions for Safe Operation carefully before using this product.

- Keep the Main Unit and Sensors out of reach from children or infirm persons.
- Take care while handling this product to avoid any mechanical or electrical damage.
- Ensure that the Main Unit is mounted in a stable horizontal or vertical position as per the instructions.
- If the Electrical Adapter is damaged or malfunctioned, replace it by another Adapter of same type (micro-USB) rated 5V & (1A minimum). Contact your local dealer for replacement.
- Any Electrical Adapter used with this product must comply with relevant regulations and standards applicable in the country of intended use.
- MURAQEB is for Indoor use only. Outdoor use is strictly prohibited.
- DO NOT expose MURAQEB to rain as it will result in electrical hazards.
- DO NOT install MURAQEB in a dusty place.
- DO NOT expose MURAQEB to water or moisture.
- DO NOT expose MURAQEB to high intensity light sources (e.g., xenon flash or laser).
- DO NOT expose MURAQEB to heat from any source and DO NOT expose to fire.
- Clean the Main Unit and Sensors using a dry cloth.
- Do Not try to open the Sensors or Main Unit as this will result in cancelling Warranty
- Contact your local dealer for replacing the batteries of the wireless sensors.

Disposal

Do not dispose electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed in landfills or dumps, hazardous substances can leak into the groundwater and get into the food supply chain, damaging your health and well-being.

Compliance

CE / FCC

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1.   Installation

You can download the **Installation and Configuration Manual**, including viewing the Demo Videos from our website:
http://www.afkardigital.com >> Products >> Mini Products

1. Open and check what is inside your MURAQEB box
    - Product Description, Warranty, & Safe Operation Manual
    - 4 screws with anchors.
    - Wireless sensors & double-face stickers. The number of sensors can be from 2 to 5 according to your order.
    - WIFI Main Unit.
    - Electrical adapter rated 5V & (1A minimum)

2. Take out the Main Unit from the box.
3. Decide where you want to mount the Main Unit, options are:
    - Vertical mounting on a wall using the attached screws with anchors.
    - Horizontal mounting on a clean surface, shelf, table.
    - Vertical mounting on a D25 rail for industrial use.

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4. Take out the electrical adapter from the box, connect it gently to the DC-IN Socket of the Main Unit. Pay attention to the right direction.

5. Connect the adapter to an AC socket. Use a Power Extension If needed.

6. Take out the wireless sensors from the box.

7. Notice the small push button at the back of the sensor

8. Press gently on the push button for (~4 seconds) until you see a blue light illuminated at the front of the sensor. The blue light will illuminate continuously for ~4sec and then disappears. The sensor now is turned ON.

> Press gently

9. Repeat the same steps for all wireless sensors coming with MURAQEB.

10. Mounting the Wireless Sensor
   - Fix the double-face sticker at the back of the sensor and mount the sensor vertically at any smooth place. Mount firmly.

   - You can mount the Sensor horizontally on a clean surface, shelf, table.
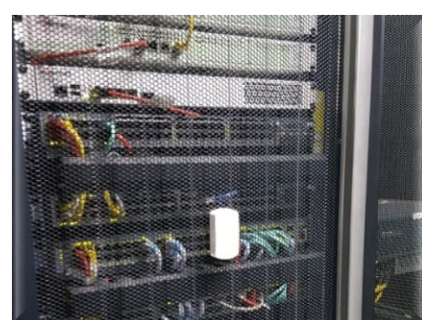
   - Ensure the sensor head is facing the air flow so that the sensor can measure temperature & humidity correctly.

> Sensor Head

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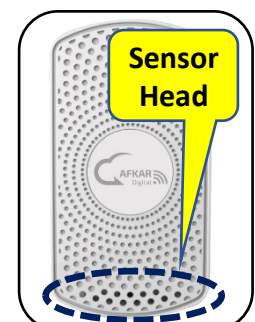
2. Configuration

2.1. Creating your Cloud Account

11. In your web browser, type https://muraqeb.smarturdon.com/

12. Click on Register as a new user.
    - Fill in **Username** / **Password**
    - Fill in a valid **email address** & a working **mobile number**
      Note: By filling a valid phone number you will receive important information about your product thru SMS messages.

13. Click on Register

14. A confirmation email will be sent to your inbox. For GMAIL, this might take up to ~3min. Pls also check your **Junk/spam** folders.
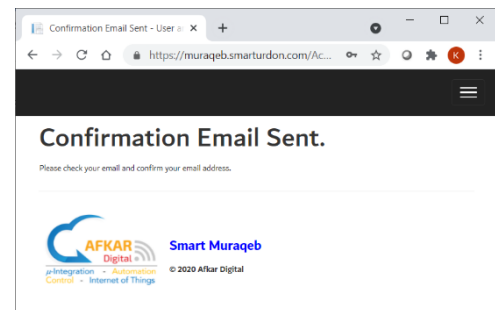
15. Once you receive the email, click on the link provided to activate your account.

16. If you see as in the aside, it means your account has been created successfully.
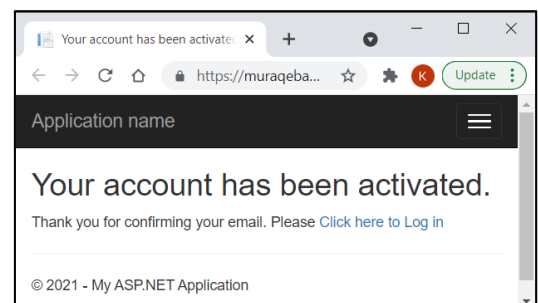
2.2. Adding MURAQEB Pro to your Cloud Account

17. In your web browser, type https://muraqeb.smarturdon.com/ and login to your account which you have just created in the previous step.

18. To start adding MURAQEB to your account, click on "+"

19. Fill in the Serial No. of MURAQEB which is labeled at the back of the Main Unit, then click on "Check".

123651506032241

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20. If the Serial No. you filled is correct, you will be asked to fill the name of the Unit.

21. Click on "Add" to add this MURAQEB to your account.

22. You can now see your MURAQEB device listed in your Cloud Account.

2.3.   Accessing & Activating MURAQEB Pro

23. Ensure that the Main Unit is connected to the AC adapter.

24. Check available WIFI networks from your PC or mobile. You should see the WIFI of MURAQEB like the example aside. The WIFI of MURAQEB will show up after ~one minute from powering the Main Unit and it will include the serial No. of your MURAQEB at the end of the name.
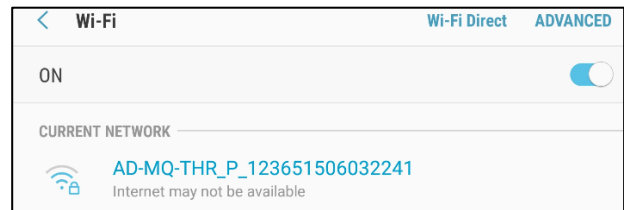
AD-MQ-THR_P_123651506032241
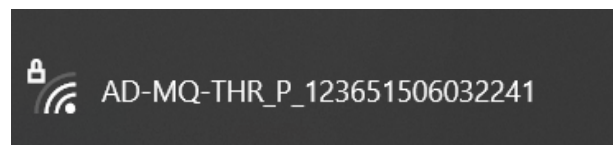
25. Select the WIFI of MURAQEB, then fill in password **12345678**

26. To ensure you camped on the WIFI of MURAQEB, the network view should be like below.

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AD-MQ-THR_P_123651506032241
No Internet, secured

Properties

Disconnect

Computer (PC)

Wi-Fi   Wi-Fi Direct   ADVANCED

ON

CURRENT NETWORK

AD-MQ-THR_P_123651506032241
Internet may not be available
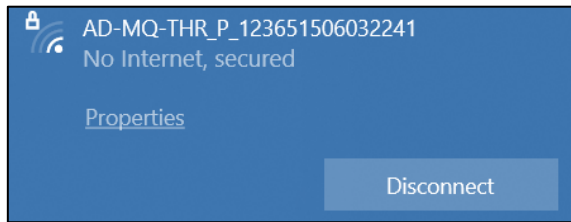
Mobile

27. In your web browser, type
http://192.168.99.1 to access MURAQB
thru the local network. Login as:
    Username: **admin**
    Password: **admin** (Later you can
    change the password)
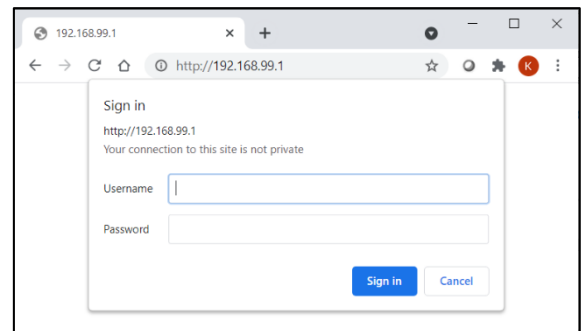
28. Your browser will show you the **WIFI
Configuration page**. Here you need to
define the local WIFI network inside
MURAQEB. Initially, under **Network
Status** there will be no defined WIFI,
and the **Saved WIFI 1 & 2** fields will be
both empty.

29. Under **WIFI Configuration**
    • Select **WIFI 1 Name**, fill in
      Password, and click on **Save &
      Restart**.
    • **MURAQEB** will reboot within 30sec
    • Ensure you mobile/PC will camp on
      the WIFI of **MURAQEB** again after
      MURAQEB has finished rebooting.

0:15

Pls wait... your module is restarting within ~30 seconds.
Pls make sure your PC/Mobile is connected back to WIFI network: **AD-MQ-THR_P_123651506032241**

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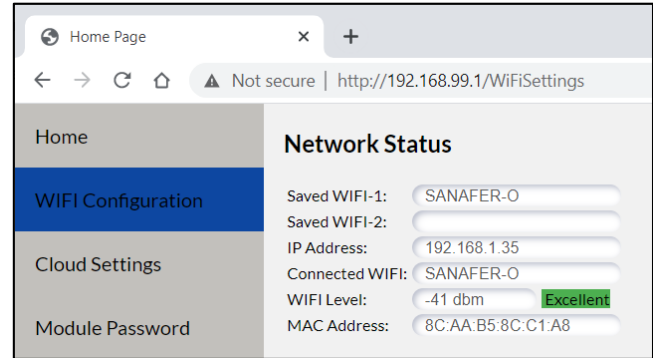Control - Internet of Things
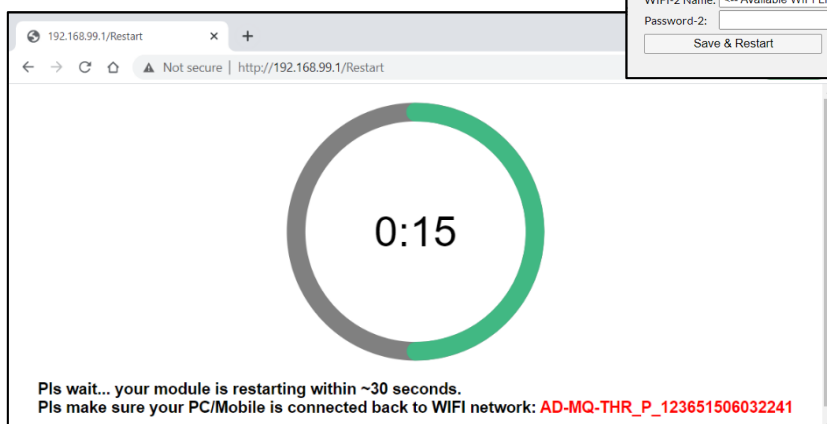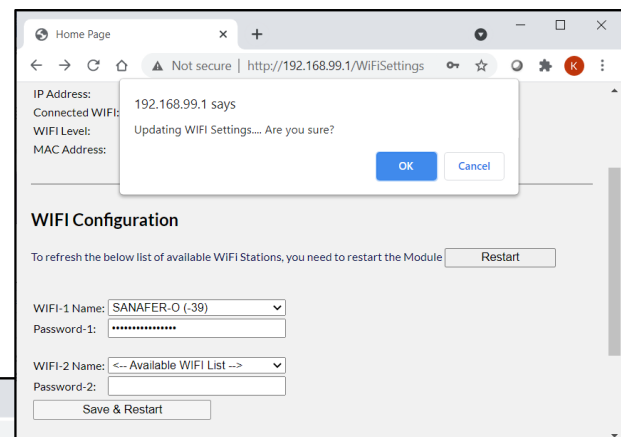
30. Login again as before:
    - Username: **admin**
    - Password: **admin**

31. Under **Network Status** you will see a valid **IP address** and the name of the WIFI you selected. If not, then check your WIFI settings again (Step 29).
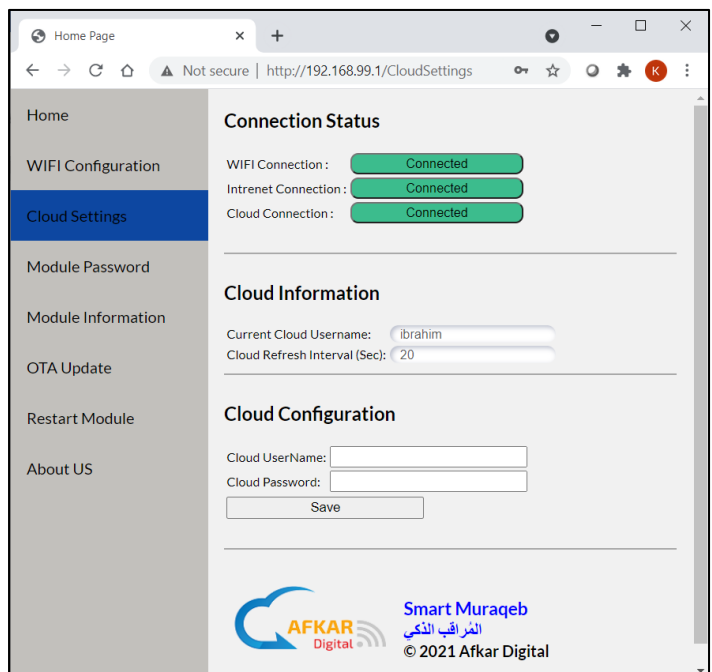

32. Go to **Cloud Settings**. Initially there will be no Cloud Information.

33. Under **Cloud Configuration** Fill in same Username and Password when you created your account (as in step 12). Click then on "<mark>Save</mark>" and confirm.
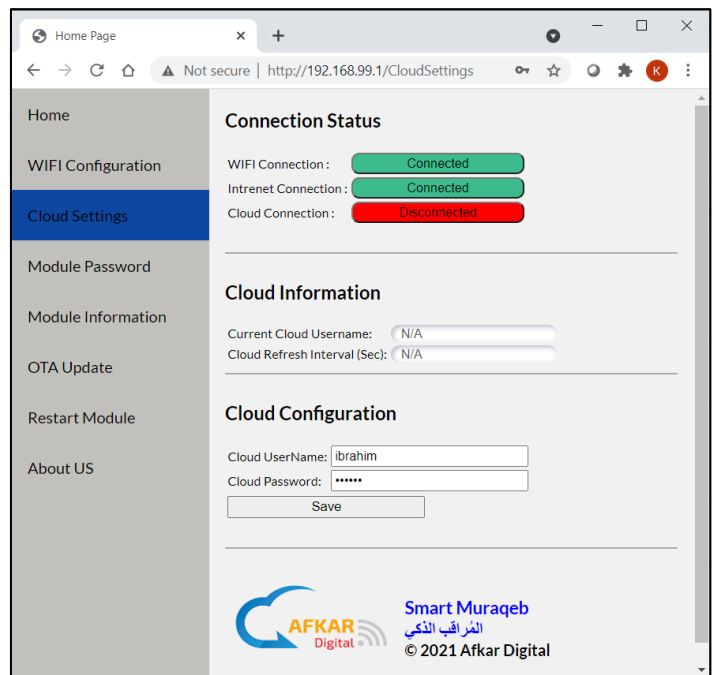
34. If account information you filled is correct, MURAQEB will show "Connected" in the **Cloud Connection** field. Else you need to check (Step 33) once again

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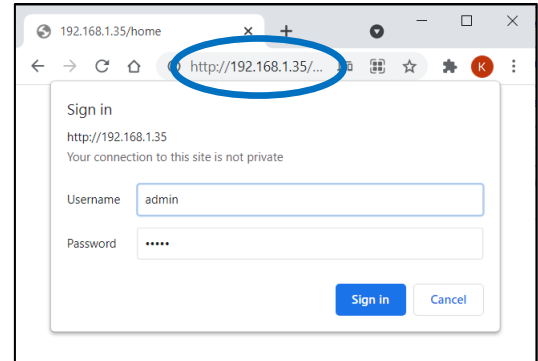Control - Internet of Things

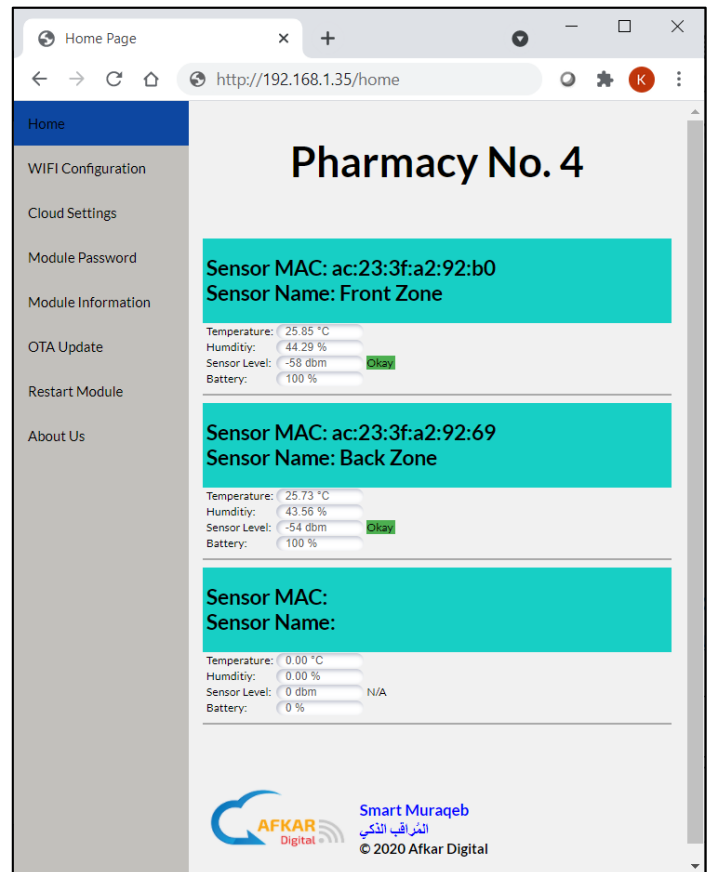## 2.4.   Monitoring MURAQEB Pro from Local Network

35. Reconnect your PC/mobile back to your local WIFI network (same one defined for MURAQEB)

36. In your web browser, fill in the IP address of MURAQEB (found in step 31). Login as before:
    - Username: **admin**
    - Password: **admin**

37. You will be able to see all the Temperature Sensors connected to MURAQEB from the local WIFI.

2.5.   Monitoring MURAQEB Pro thru the Internet

38. In your browser, type https://muraqeb.smarturdon.com to access your account.

39. Login with your account credentials.

40. Select which MURAQEB you want to monitor from the list.

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41. You should be able now to monitor MURAQEB you selected thru the Internet.

42. To add another MURAQEB to your account, you need to repeat Parts (2.2 and 2.3) only.
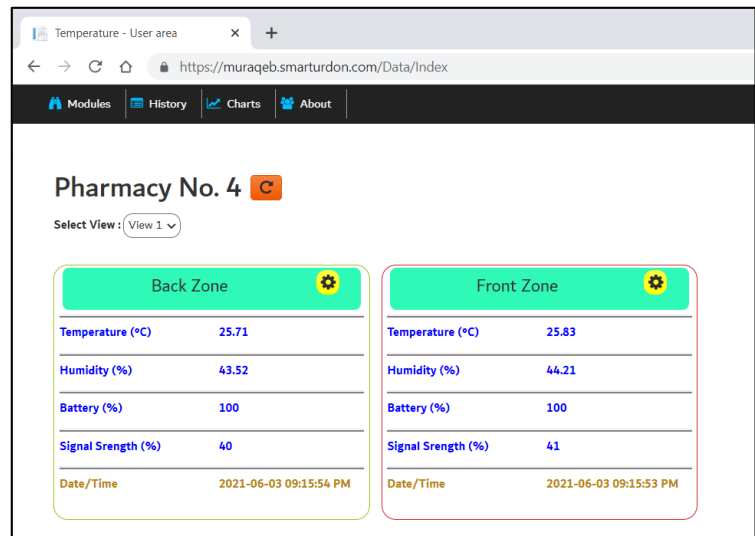
3. Shutting Down MURAQEB Pro & Turning OFF Wireless Sensors

If you do not want to use MURAQEB for some period or need to move MURAQEB from one place to another. You need to do below 2 steps:

3.1. Turning OFF MURAQEB Pro

1. Disconnect the electrical adapter from the Main Unit and then unplug the adapter from the AC source.

3.2. Turning OFF Wireless Senores to extend Battery Lifetime

1. Notice the small push button at the back of the sensor.

2. Press gently on the push button for (~4 seconds) until you see a blue light flashing at the front of the sensor. The blue light will flash for ~3sec and then disappears. The sensor now is turned OFF.

3. Repeat the same steps for all wireless sensors you want to turn off.

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4. Operating MURAQEB Pro

You can learn more about Operating MURAQEB and its Features by viewing the Tutorial Videos form our website:

http://www.afkardigital.com >> Products >> Mini Products

- Creating Cloud Account
- Configuring MURAQEB
- Displaying Graphs / Tables
- Selecting Views
- Setting Refresh Timer/Storage Timer
- Upgrading MURAQEB Software
- Restarting and Shutting down MURAQEB
- Other Settings, and more…

Contact us for any queries or information related to MURAQEB

Replacing Sensor Battery

Ordering more Sensors

Technical Issues

Any Further Queries & Information