

IG100 USER MANUAL

iG100

User Manual of IG100 IoT Gateway

Version 1

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This is a non-binding Permanent Reference Document (PRD) prepared by NybSys

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1 Overview

In the era of technological advancement, IoT (Internet of Things) plays an important role in our daily life activities by involving the usage of internet and exchanging data. iG100 is an intelligent IoT gateway that has standardized infrastructure solutions developed to meet the demands of IoT based projects. This cutting-edge technology iG100 is a widespread solution of hardware and software components connecting with both server side and sensor, side from where information can be seen and command can be provided through dashboards and smartphones. User can deploy some sensors in a place and see these data in a smartphone or the dashboard using IoT gateway iG100. Not only that they can also provide some instructions to iG100 based on their demands.

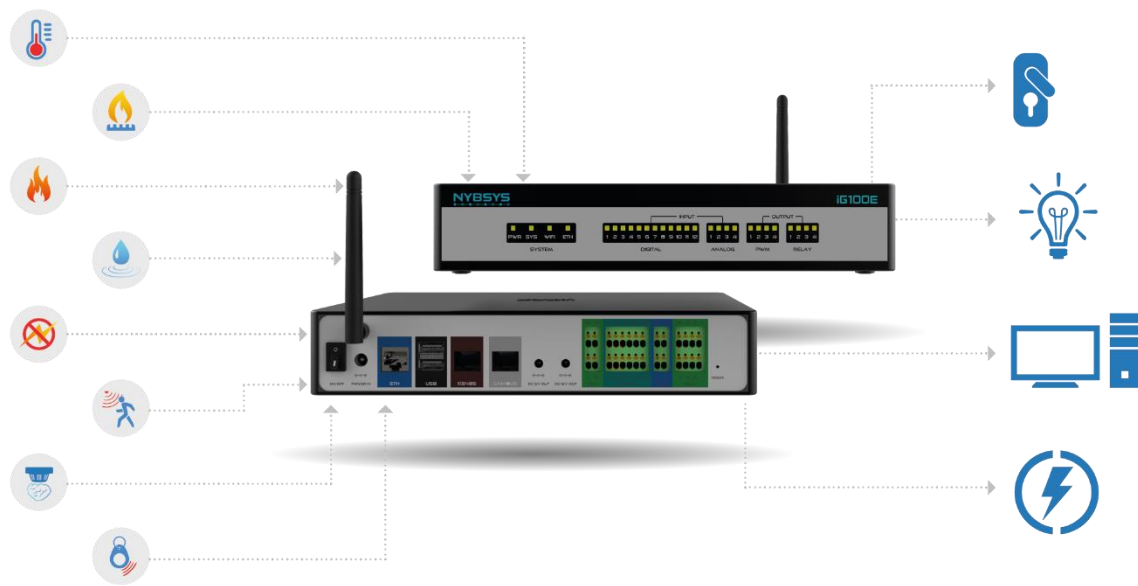


Figure 1: iG100 System Overview

2 Audience

The aim of this document is to assist solution architects, sales engineers, field engineers and consultants in planning, designing, and deploying and the people who work on home automation. Besides, this document provides information needed to configure, use, and update iG100. It is intended for system integrators who are configuring iG100. The document also aims to make the use of the IoT gateway understandable to the owners, occupants and employees of a residence. Moreover, it aims to make our retailers familiar with the use of this IoT gateway iG100. With a good knowledge they will be able to explain its use to the general customers. Finally, it will acknowledge our clients deeply who have a basic knowledge about the functioning of the product. We sincerely hope this documentation will shed enough light on the technical aspects of the IoT gateway iG100 for the reader.

3 Architecture

Design of iG100 depends on custom applications for example home automation, agricultural land monitoring, industrial automation, vehicle tracking, environmental monitoring and many more. Based on the demand of the application, one needs to calibrate the following topics:

- Sensor range
- Power requirement
- Scalability and security
- Performance

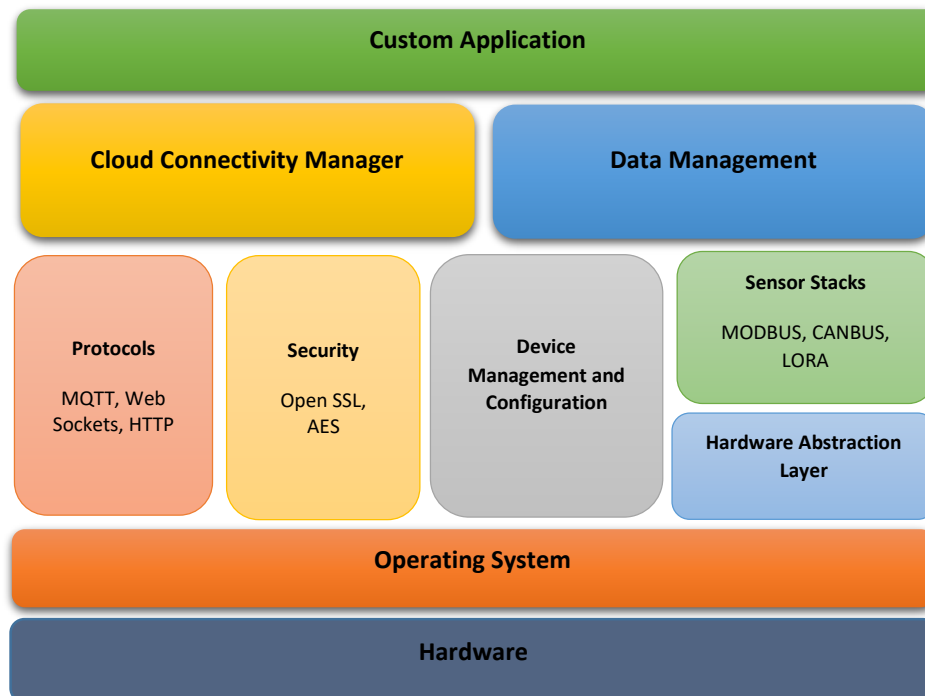


Figure 2 Architecture of iG100

4 Hardware Setup

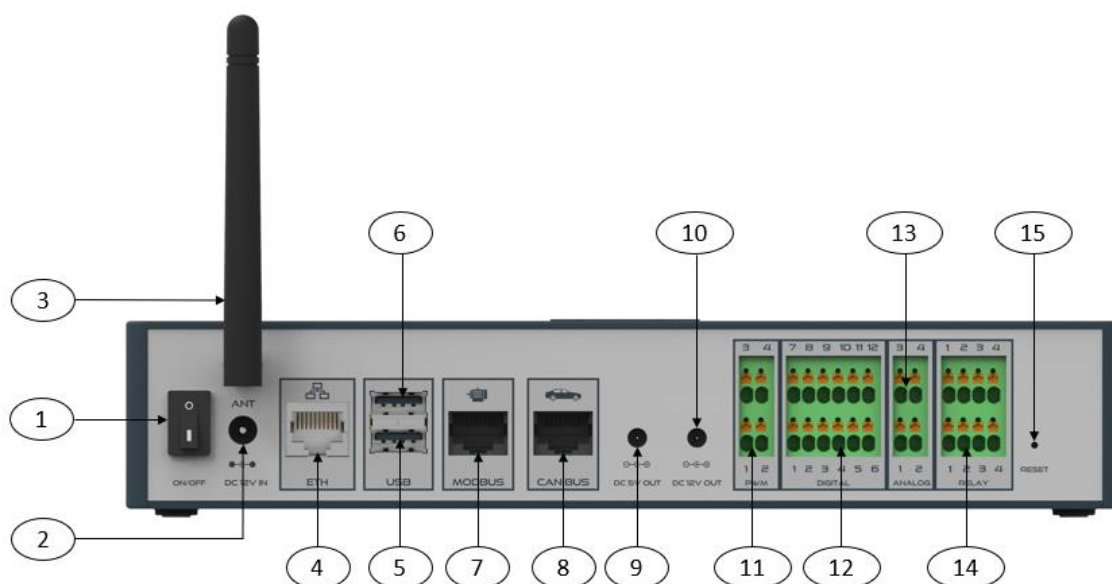


Figure 3: Rear View of iG100

Table 1 Ports courtesy of rear view in iG100

1	Power On/OFF Switch
2	Power Input Port
3	2.4 GHz Wi-Fi Antenna
4	RJ45 for Ethernet
5	USB
6	USB
7	RJ45 for Modbus
8	RJ45 for CAN bus
9	5V Output for Sensors
10	12V Output for Sensors
11	4 PWM Output
12	12 Digital Input
13	4 Analog Output
14	4 Relay Output
15	Reset

Table 2 Technical specifications and physical operating conditions of iG100

CPU Core	
CPU	ATHEROS AR9331 Chipset, 400MHz
Memory and Storage	
RAM	64 MB
Storage	Flash 16 MB
Communication	
Ethernet	10/100 BASE TX RJ-45 connector.
WLAN	802.11b/g/n Wi-Fi interface (2.4GHz Antenna)
USB	2 x USB 2.0
I/O	
CAN bus	1 x RJ45 Connector
Modbus	1 x RJ45 Connector
Input	• 12 pins for digital sensors and actuator • 4pin for analog sensors and actuator
Output	• 4 pins for PWM • 4 pins for relays
Electrical	
Input Power	12V, 2A, 24W (DC Adapter/PoE/PoE++)
Output Power	12V, 5V and max 1A (Dc jack)
PoE	• IEEE 802.3at and IEEE802.3af compliant.
Other	
RTC	Real Time Clock Operated from on-board coin-cell battery

Mechanical	
Dimensions	• 9.2 x 6.9 x 1.83 in • 233.6 x 175.3 x 46.5 mm
Enclosure Material	Plastic (ABS)
Weight	
Environmental	

Operation Temperature	Commercial: 0° to 70° C (default) Extended: -20° to 70° C Industrial: -40° to 85° C
Storage Temperature	-40° to 85° C
Relative Humidity	10 % to 90 % (operation) 5 % to 95 % (storage)

5 Software

Table 3 System Specifications of IG100

System	
OS	NSOS v1.0
CLI	Support for CLI (Command line interface)

5.1 Software update

NSOS v1.0 can be upgraded automatically or manually. However, other software will update automatically after NSOS v1.0 up gradation.

6 Features and Benefits

Features

- **Connectivity Option:** Sensors can connect with iG100 through wire. Again, iG100 can communicate using Wi-Fi, USB modem and Ethernet with cloud.
- **Power Option:** Adapter (12V, 2A), PoE/PoE++ (optional), power out (5V, 12V, max 1A).
- **Real Time Monitoring:** Real time data visualization and controlling.
- **Multiple inputs and outputs:** It have connectivity options of 12 digital sensors, 4 analog sensors, 4 relays and 4 PWMs itself.
- **Low power consumption**
- **Support:** Modbus (RS-485), CAN bus, USB.

Benefits

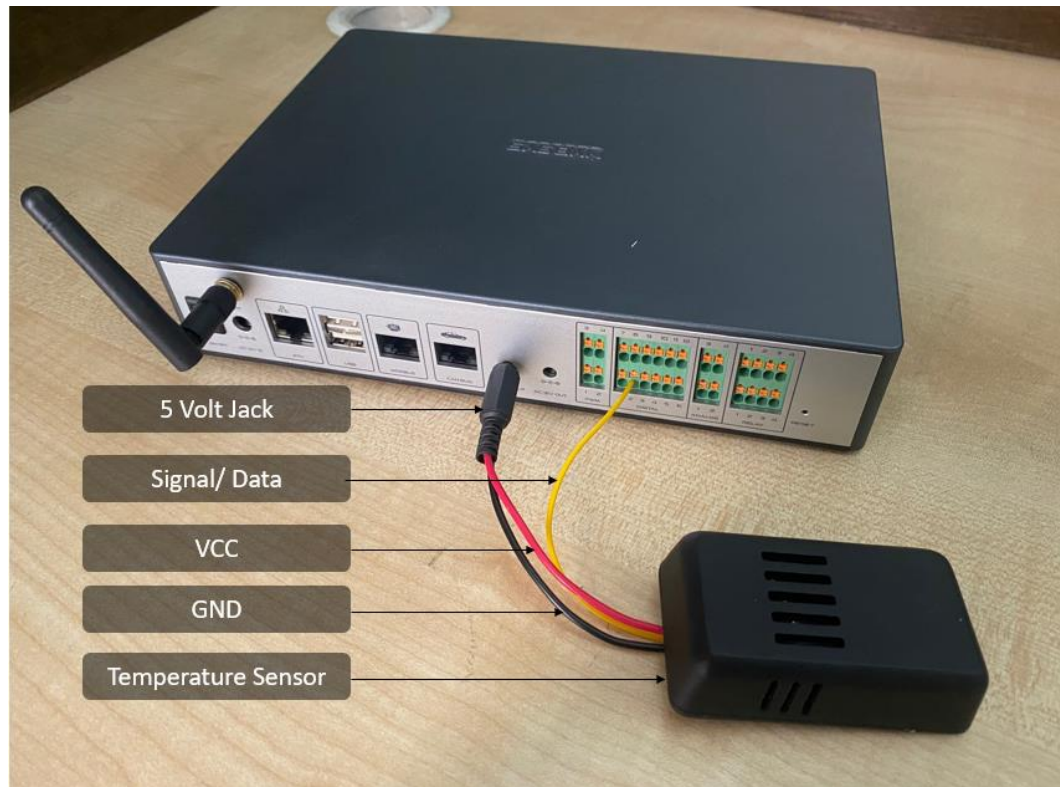
- **Additional Devices:** Input and output can be extended using I/O extender.
- **Controlling the devices:** Home appliances can be controlled from anywhere and anytime.
- **Data Acquisition Coverage:** Through Modbus communication distance is 1.2km and by LORA it is 10Km.
- **Security:** SSL encrypted.
- **Automation:** Controlling loads based on sensor data.
- **Light weighted**

7 iG100 Installation Procedure

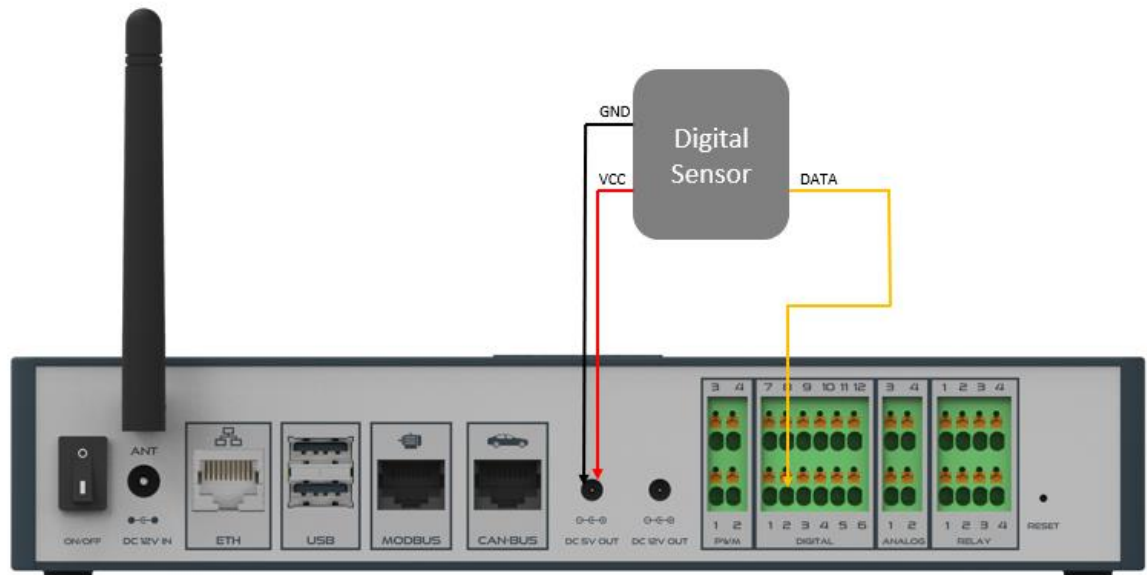
- 1) Unpack iG100 and place it in a desirable place.
- 2) Connect Wi-Fi antenna with iG100.
- 3) Connect adapter with iG100 and press the switch ON button. Besides, you can give power to the device through Ethernet cable (PoE/PoE++).
- 4) Connect Ethernet or Wi-Fi with iG100.
- 5) Connect any digital sensor or analog sensor with digital input and analog input respectively.
- 6) Connect loads to PWM or relay.

7.1 Physical IO Configuration

7.1.1 Digital Connection



(Fig- 7.1.1: Physical connection)

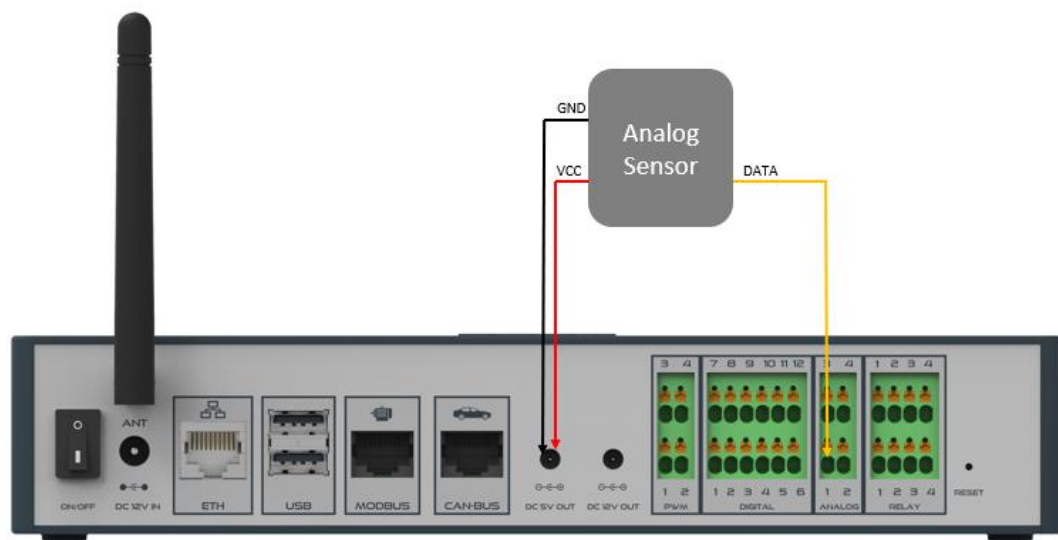


(Fig- 7.1.2: Connection Diagram)

7.1.2 Analog Connection



(Fig. 7.2: Physical connection)



(Fig-7.3: Connection diagram)

7.1.3 PWM Connection

Following digital connection (Fig 7.1.1) PWM connection can be setup according to PWM port.

7.1.4 Relay Connection



Fig-7.4.1: Physical Connection



Fig-7.4.2: Connection Diagram

8 Enhanced features

An extender can add up to 64 sensors and actuators. Two IG100 can communicate through Modbus protocol within 1.2Km. Again, if a repeater is placed between them, the communication will be established within 2.4Km.

9 Security and access control setup

- Communication SSL encrypted
- Device password protected

10 Bill of materials

Bill can be varied depending on the demand of sensors and actuators as well as the number of iG100.

11 General and Safety information

- **DO NOT** open the enclosure. You will lose the guarantee, if you do so.
- **DO NOT** remove any of the components. **DO NOT** open the enclosure. You will lose the guarantee, if you do so.
- **DO NOT** remove any of the components.
- **DO NOT** allow contact between metallic objects and the electronic part in order to avoid injury and burn.
- **NEVER** submerge the equipment in any liquid.
- Keep the equipment in a dry place away from children
- **CHECK** the maximum permitted voltage and ampere range before plug in. Otherwise device can be damaged.
- Keep the device within the temperature mentioned in the environmental section of technical specification.
- Be careful if you are connected iG100 through Ethernet or Wi-Fi. Otherwise, the device could become inaccessible if the settings are changed incorrectly.
- Immediately disconnect from main electricity, if there is a power failure.
- If software failure occurs, contact the service engineers of NYBSYS.



Before connecting the adapter, please check the polarity of the adapter. Otherwise, reverse polarity can cause the damage of the device.



When you take power from iG100 (12V) for any sensors, make sure the precautions are taken.



When you connect relay, notice the pin number of the relay. Otherwise, relay will not work.



Do not touch iG1000 physical I/O while relay is connected with AC220V/50Hz

11.1 Wi-Fi Configuration Guideline

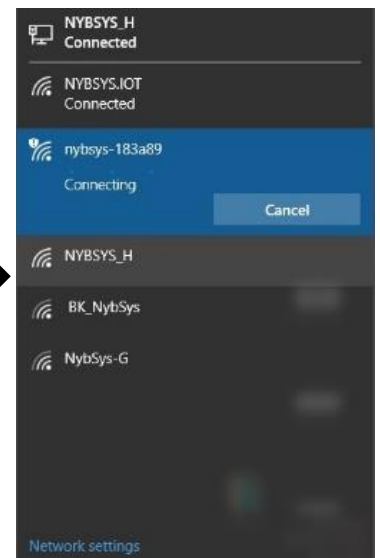
1. Power on the device.
2. Search connect to the built in Wi-Fi hotspot generated by iG100 using your computer/laptop after giving power connection to iG100. Show in fig: 11.1 to 4.



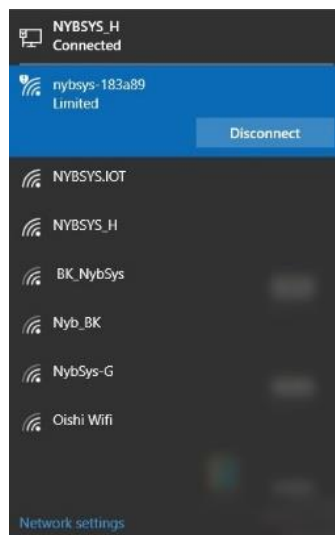
(Fig: 11.1)



(Fig-11.2)

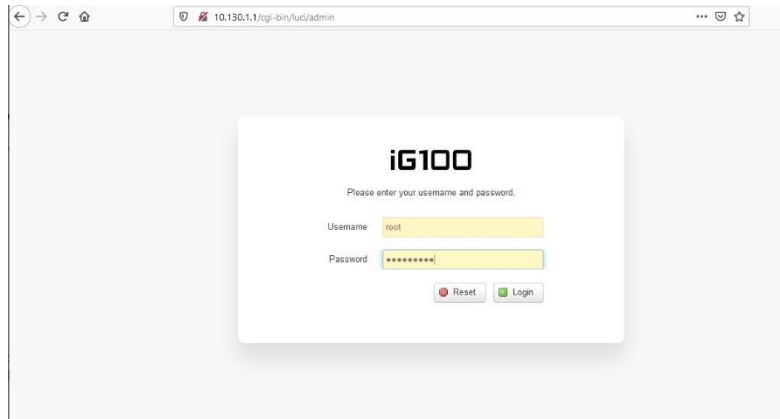


(Fig: 11.3)

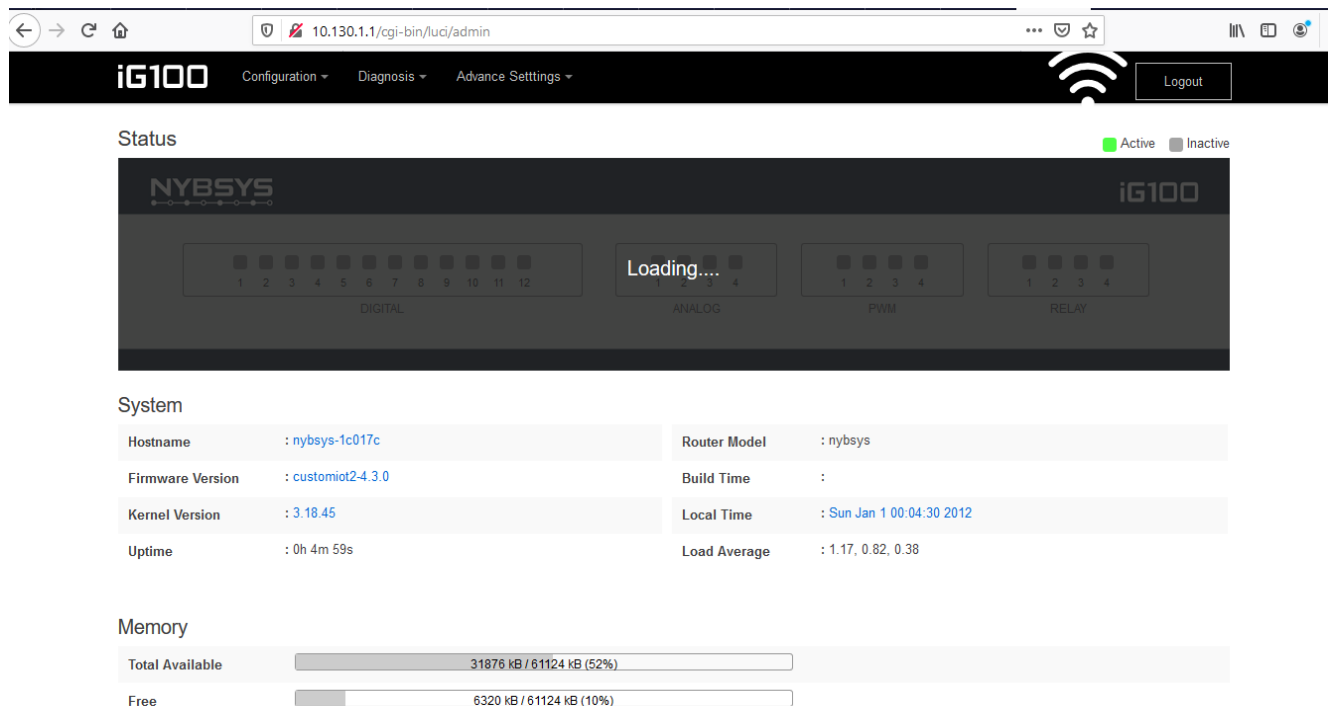


(Fig: 11.4)

- Open browser and click <http://10.130.1.1> Next you will see a page where user name and password will be asked.
- Provide the user name and password showing in the device box and hit login to enter into the configuration page of iG100.

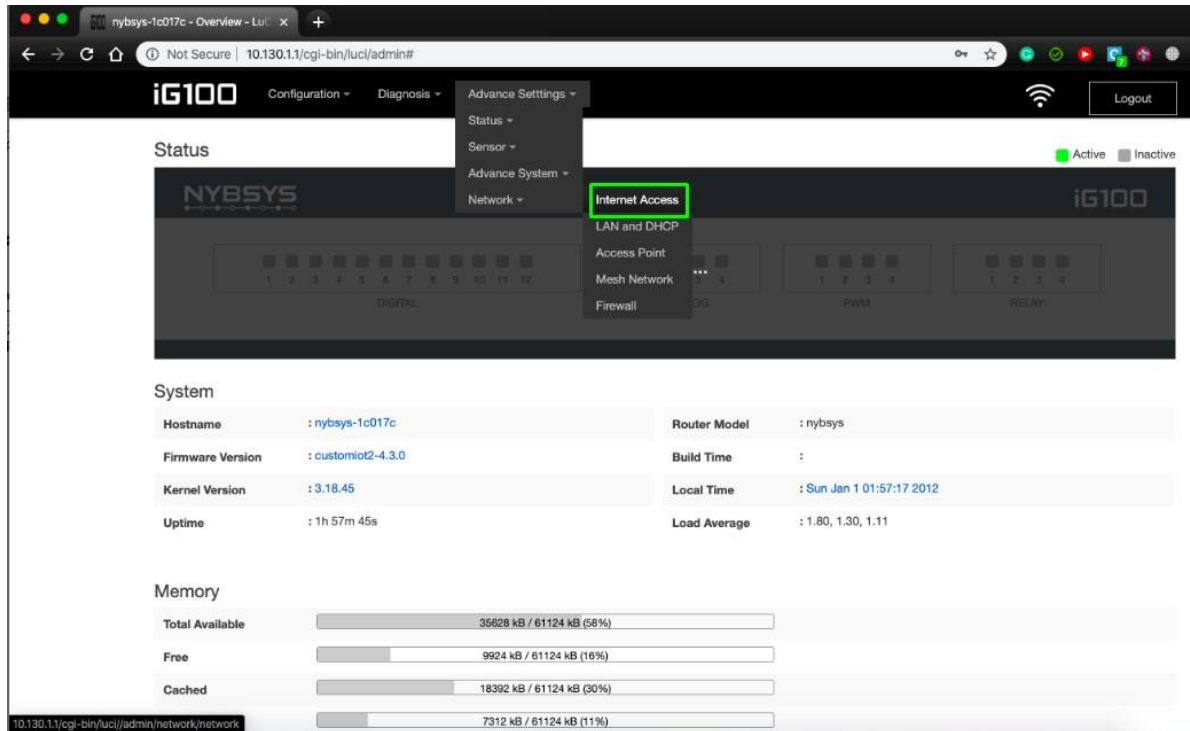


(Fig: 11.5)



(Fig: 11.6)

5. Go to "**Advance Settings**" >> then "**Network**" >> and then click on "**Internet Access**" page.
Show in fig- 11.7.



(Fig: 11.7)

6. Configure the "Internet Access" section as below: Show in fig- 11.8.
 - a. Choose the "Wi-Fi Client" from "Access Internet Via"
 - b. Type "SSID" of your router.
 - c. Choose "Encryption" of your router.
 - d. Type of your router "Password"
 - e. Finally, select "DHCP" from "Way to Get IP" drop down. (If static IP is selected from "**Way to get IP**" drop down list, please provide an IP, Netmask, Gateway, DNS Server information about your network.

The screenshot shows a web browser window with the address bar displaying "10.130.1.1/cgi-bin/luci//admin/network/network". The page title is "iG100" and the navigation menu includes "Configuration", "Diagnosis", and "Advance Settings". The main content area is titled "Small Enterprise-Campus Network" and contains two sections: "Internet Access" and "USB Modem Setting".

Internet Access

- Access Internet Via:
- SSID:
- Encryption:
- Password:
- Way to Get IP:
- Display Net Connection:
- ☒ Continuously Check Net Connection

USB Modem Setting

- USB Modem: No USB Detected
- Modem Status:
- Available USB Port:
- USB Modem Service:
- VID:

(Fig: 11.8)

- Now click on "**Save & Apply**" button to finish the setup. Show in fig- 11.9.

nybsys-1c017c - Internet Access X

Not Secure | 10.130.1.1/cgi-bin/luci//admin/network/network

iG100 Configuration ▾ Diagnosis ▾ Advance Settings ▾

Available USB Port

USB Modem Service UMTS ▾

VID USB Vendor ID

PID USB Product ID

Service APN

Dial String *99#

Username root

Password *****

PIN

USB Serial Port ttyUSB0 ▾

Save & Apply Save Reset

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(Fig: 11.9)

8. Restart the device after setup all the configuration.
9. Go to the configuration page of your router and have an access to the page.

admin

Login

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(Fig: 11.10)

10. At first click on "**DHCP**" and then click on "**DHCP Client List**" you can see all the connected devices.

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
2	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
3	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
4	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
5	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
6	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
7	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
8	mybbs-1ac22c	A8-4D-41-1A-C2-2C	192.168.0.101	47:57:53
9	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
10	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53

Refresh

(Fig: 11.11)

11. iG100 connect with the Wi-Fi and you can see client IP from DHCP List.

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
2	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
3	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
4	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
5	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
6	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
7	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
8	mybbs-1ac22c	A8-4D-41-1A-C2-2C	192.168.0.101	47:57:53
9	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53
10	DESKTOP-123456	08-00-2B-01-02-03	192.168.0.100	47:57:53

Refresh

(Fig: 11.12)

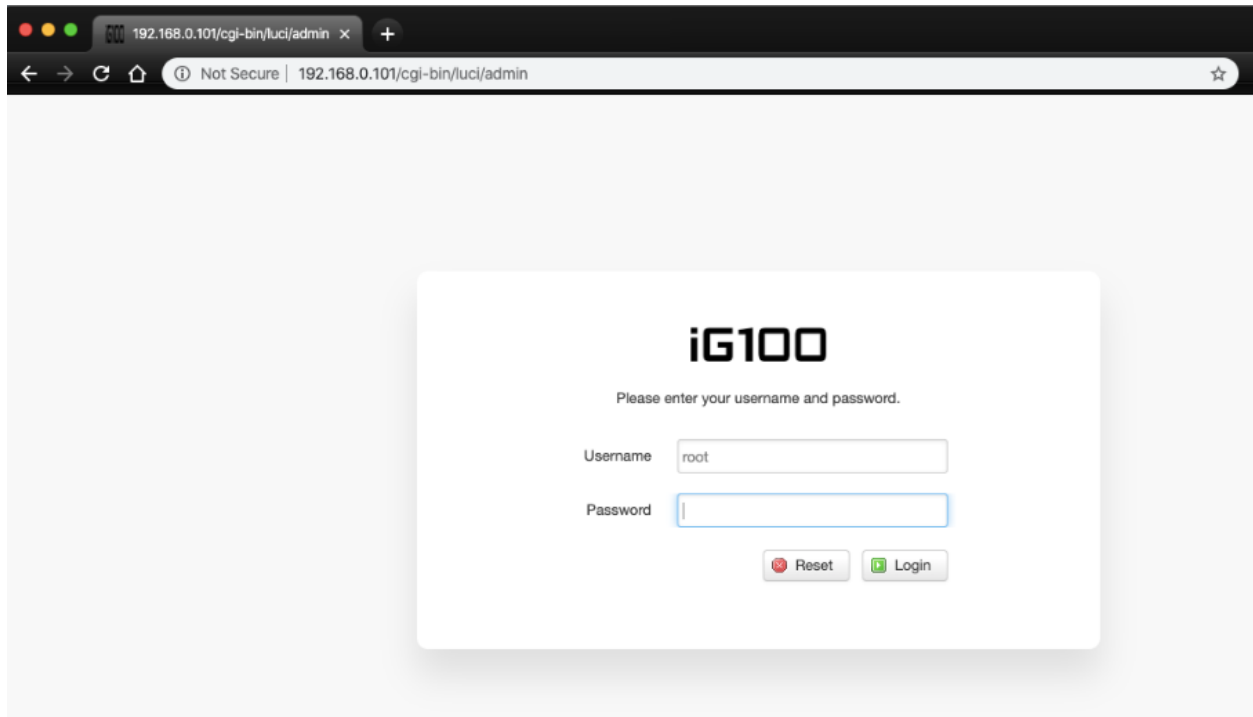
12. Now you can go to the configuration page of your iG100 using the assigning IP of your router. You can reverse the method for disconnecting Wi-Fi from iG100.

12 Connect to IoT Gateway

12.1 Login to IoT Gateway

Step 1: As per getting DHCP IP open it to browser.

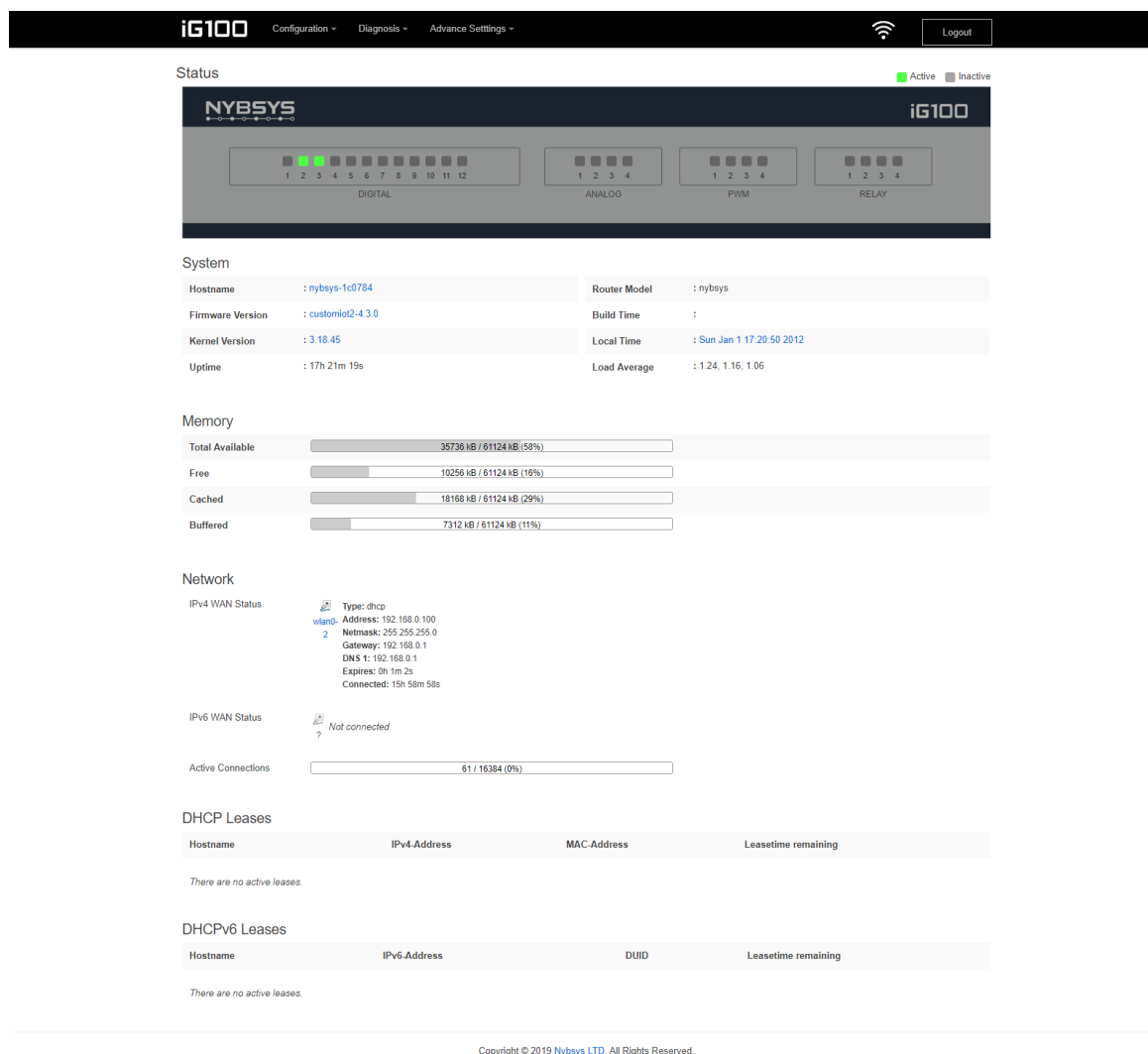
192.168.0.101



(Fig: 12.1)

Step 2: Please enter the Username and Password and then click on the "Login" button.

Step 3: After login you will get this window.



(Fig: 12.2)

12.2 Wi-Fi Connection Status

If a network connection is ok then Wi-Fi logo shown in properly, but when the network connection is not ok then the Wi-Fi logo is shown in as a stop/ disconnected state.

See the below image:



(Fig: 12.3)

12.3 I/O Configuration-IG100 Gateway

Here we can set configure and update the port of IG100 device. In here you can configure four types of port based on the required.

12.3.1 Input Port Configuration:

Step 1: After login, click on the "I/O **Configuration**" from Configuration module of the menu bar. You will get the below window:

iG100
Configuration ~
Diagnosis ~
Advance Settings ~
Logout

I/O Configurations

Inputs Configuration

Digital Port Configuration

Port Name	Sensor Type	Name	Action
D1	Temperature and Humidity (DHT11)	Temperature	Update Reset
D2	Ultra Sonic Sensor - Digital	MM	Update Reset
D3	Choose One	Definition	Save
D4	Capacitive Proximity Sensor - Digital	PPP	Update Reset
D5	☐ Interrupt Choose One	Definition	Save
D6	☐ Interrupt Choose One	Definition	Save
D7	Motion Sensor - Digital	Main Door Motion Sensor	Update Reset
D8	Choose One	Definition	Save
D9	Choose One	Definition	Save
D10	Choose One	Definition	Save
D11	☐ Interrupt Choose One	Definition	Save
D12	☐ Interrupt Choose One	Definition	Save

Analog Port Configuration

Port Name	Sensor Type	Name	Action
A1	Smoke Sensor - Analog	Smoke	Update Reset
A2	Choose One		Save
A3	Choose One		Save
A4	Choose One		Save

Outputs Configuration

PWM Port Configuration

Port Name	Definition	Action
P1	Kitchen Room Light	Update Reset
P2		Save
P3		Save
P4		Save

Relay Port Configuration

Port Name	Definition	Action
R1	Light	Update Reset
R2		Save
R3		Save
R4		Save

(Fig: 12.4)

Step 2: Please select a "Sensor Type" and enter the "Name" under the Port Name.

Step 3: Click on the "Save" button. (Every single port can save separately).

Port Name	Sensor Type	Name	Action
D1	Temperature and Humidity (DHT11)	Humidity Sensor	Update Reset
D2	Choose One	Definition	Save
D3	Choose One	Definition	Save
D4	Choose One	Definition	Save
D5	☐ Interrupt Choose One	Definition	Save
D6	☐ Interrupt Choose One	Definition	Save
D7			

(Fig: 12.5)

Step 4: Digital port range is: D1 to D12

Step 5: You can set the analog port configuration in the same way.

Analog Port Configuration

Port Name	Sensor Type	Name	Action
A1	Smoke Sensor - Analog	Smoke sensor	Update Reset
A2	Choose One		Save
A3	Choose One		Save
A4	Choose One		Save

Outputs Configuration

PWM Port Configuration

(Fig: 12.6)

Step 6: Analog port range is: A1 to A4.

12.3.2 Output Port Configuration:

Here two types of output port can configure (PWM and Relay).

Step 1: Please enter the "Definition" field under the Port Name.

Step 2: Click on the "Save" button.

Outputs Configuration

PWM Port Configuration

Port Name	Definition	Action
P1	Fan	Update Reset
P2		Save
P3		Save
P4		Save

(Fig-12.7: PWM Port Configure)

10.130.1.1/cgi-bin/luci/admin/config/io

iG100 Configuration ▾ Diagnosis ▾ Advance Settings ▾ Logout

P3 Save

P4 Save

Relay Port Configuration

Port Name	Definition	Action
R1	Light	Update Reset
R2		Save
R3		Save
R4		Save

(Fig-12.8: Relay Port Configure)

12.4 Trigger Settings

12.4.1 Add New Trigger

Step 1: Open the "Trigger Settings" page from the Configuration module.

iG100 Configuration ▾ Diagnosis ▾ Advance Settings ▾ Logout

Trigger Settings

Add New Trigger

Trigger Name

Trigger Description

Trigger Time (second)

Set Condition

Will Be True IF

Choose Input ▾

Choose Condition ▾

Compare Value

And Or Done

Set Action

Set Output ▾ Choose Output ▾ Set Value

Add

Cancel Create Trigger

Name	Description	Condition	Result	Action
Test Trigger Updated Trigger Time: 60 Sec	description of the test trigger	Digital 4 value greater_than 3	Send Me A SMS UPDATE	Resume Update Remove
Second Test Trigger Trigger Time: 3000 Sec	description	Digital 4 value greater_than 20	Set R1 value 1	Resume Update Remove

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(Fig: 12.4.1)

Step 2: Enter the “Trigger Name”, “Trigger Description” and “Trigger Time (Second)” and Set Condition and Set Action.

(Fig 12.4.2: Add Trigger)

(Fig 12.4.3: Set Condition)

(Fig 12.4.4: Set Action)

Step 3: Click on the “Create Trigger” button after filled up all required fields. You will see the trigger list bottom of the page. Like figure 12.4.5:

Name	Description	Condition	Result	Action
Motion Trigger	when motion detect light will on	Digital 5 value equal 1	Set R1 value 1	Pause Update Remove
Trigger Time: 5 Sec				

(Fig 12.4.5: Action List)

12.5 Notification

12.5.1 Create / Update Notification:

Step 1: Open the Notification page from the "Configuration" menu.

Set Your Notification

Create/Update Notification

Name:

Type:

Interval:

SMS Notification Settings

Mobile Number:

Text:

Name	Type	Interval	Action
Send Me A SMS UPDATE	SMS	1000	Update Delete
broker tesgt	BROKER	100	Update Delete
New Sms	SMS	5000	Update Delete
Send Mail When Temperature is hot	MAIL	1000	Update Delete

(Fig-12.5.1)

Step 2: Enter the "Notification Name" and select "Notification Type" and then "Notification Interval"

Step 3:

- Enter the "Mobile Number" and "Text" If Notification Type is "SMS" Selected.
- Enter the "Email Address" and "Message" If Notification Type is "Mail" Selected.
- Enter the required Mqtt Notification Setting info If Notification Type is "Mqtt Publish" Selected.

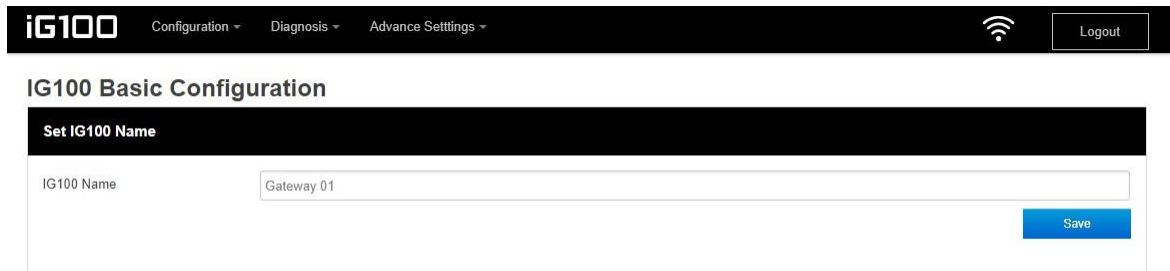
Step 4: Finally click on the "Create Notification" button and you will see the added notification in the list.

12.6 IG100 Configuration

12.6.1 Set IG100 Basic Configuration

This gateway name will be shown in the IG100 app device searching.

Step 1: Open the IG100 Configuration page form the menu of the module.



The screenshot shows the iG100 Basic Configuration page. At the top, there is a navigation bar with the iG100 logo and links for Configuration, Diagnosis, and Advance Settings. A wireless signal icon and a Logout button are also present. The main section is titled 'IG100 Basic Configuration'. Below this, there is a sub-section 'Set IG100 Name'. It contains a text input field labeled 'IG100 Name' with the value 'Gateway 01' entered. To the right of the input field is a blue 'Save' button.

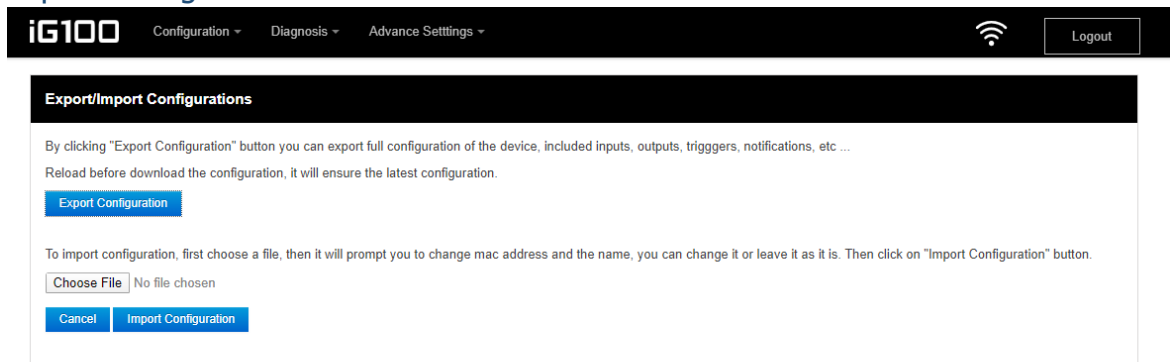
(Fig-12.6.1)

Step 2: Enter the "IG100 Name" to the name field.

Step 3: Click on the "Save" button.

12.7 Export and Import Configurations

12.7.1 Export Configuration:



The screenshot shows the iG100 Export/Import Configurations page. At the top, there is a navigation bar with the iG100 logo and links for Configuration, Diagnosis, and Advance Settings. A wireless signal icon and a Logout button are also present. The main section is titled 'Export/Import Configurations'. It contains the following text: 'By clicking "Export Configuration" button you can export full configuration of the device, included inputs, outputs, triggers, notifications, etc ...'. Below this, it says 'Reload before download the configuration, it will ensure the latest configuration.' and there is a blue 'Export Configuration' button. Further down, it says 'To import configuration, first choose a file, then it will prompt you to change mac address and the name, you can change it or leave it as it is. Then click on "Import Configuration" button.' Below this text, there is a 'Choose File' button, a 'No file chosen' status, and two buttons: 'Cancel' and 'Import Configuration'.

(Fig-12.7.1)

Step 1: By clicking "Export Configuration" button you can export full configuration of the device, included inputs, outputs, triggers, notifications, etc.

12.7.2 Import Configuration:

Step 1: At first chose a file for import configuration.

Step 2: Then it will prompt you to change Mac address and the name. You can change it or leave it as it is.

iG100 Configuration ▾ Diagnosis ▾ Advance Settings ▾ Logout

Export/Import Configurations

By clicking "Export Configuration" button you can export full configuration of the device, included inputs, outputs, triggers, notifications, etc ...
 Reload before download the configuration, it will ensure the latest configuration.

[Export Configuration](#)

To import configuration, first choose a file, then it will prompt you to change mac address and the name, you can change it or leave it as it is. Then click on "Import Configuration" button.

Change mac address. (optional)

Change device name. (optional)

[Cancel](#) [Import Configuration](#)

(Fig-12.7.2)

Step 3: Click on "Import Configuration" button.

12.8 Command Execution Window

Step 1: You can get this window after open the page.

iG100 Configuration ▾ Diagnosis ▾ Advance Settings ▾ Logout

Command execution window

Nybsys Ig100 ~ help
 Total Time Take: 7780ms

Nybsys Ig100 ~

(Fig-12.8)

Step 2: Write the command to the text box and press "Enter" key.

Step 3: Command will be generated.

12.9 Device Log

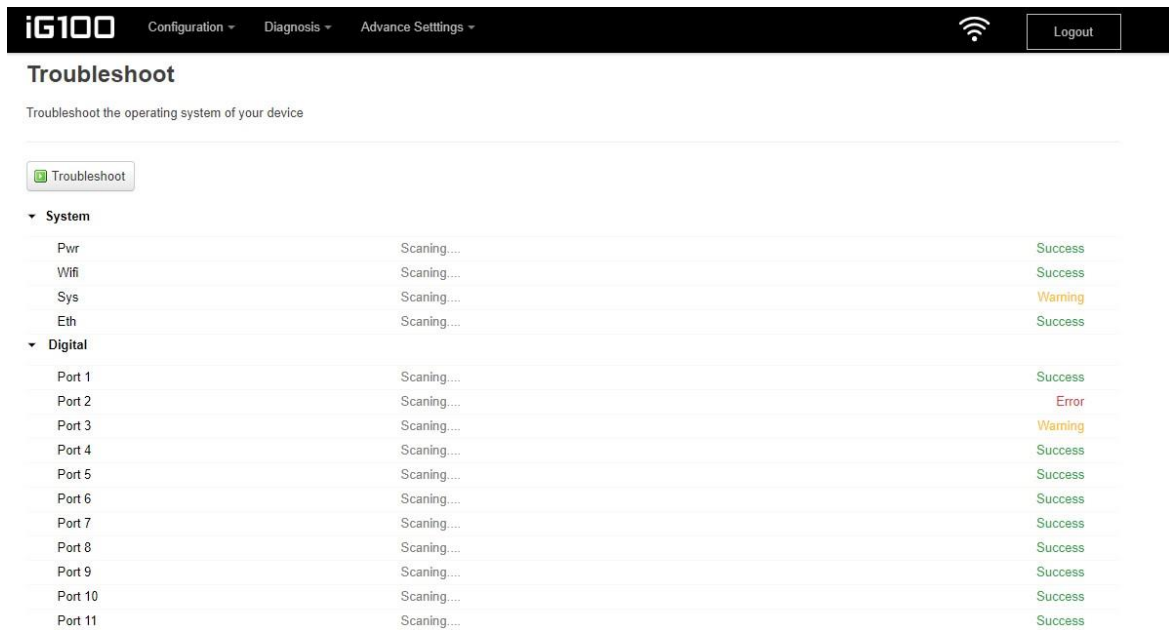
1. To show the device log, go to "Device Log" page from the menu
2. All the logs automatically loaded in the page.

 Configuration Diagnosis Advance Settings 192.168.0.1  Logout			
Log window			
Log Type	Message	Event	Time
error	publish response message exception	ig100_mqtt_class	1325377105.215
error	request parser or serial write error	ig100_callback_queue	1325400964.9806
error	file not found exception	ig100_read_write_relay_pwm_file	1325400964.3205
error	request parser or serial write error	ig100_callback_queue	1325398795.3847
error	file not found exception	ig100_read_write_relay_pwm_file	1325398794.5411
error	request parser or serial write error	ig100_callback_queue	1325397645.5389
error	file not found exception	ig100_read_write_relay_pwm_file	1325397644.3707
error	request parser or serial write error	ig100_callback_queue	1325396324.9268
error	file not found exception	ig100_read_write_relay_pwm_file	1325396324.3473
error	request parser or serial write error	ig100_callback_queue	1325395984.9953
error	file not found exception	ig100_read_write_relay_pwm_file	1325395984.2984
error	request parser or serial write error	ig100_callback_queue	1325395975.0251
error	file not found exception	ig100_read_write_relay_pwm_file	1325395974.4193
error	request parser or serial write error	ig100_callback_queue	1325395885.1826

(Fig-12.9)

12.10 Troubleshoot

1. For Troubleshooting the device, you need to click on the "Troubleshoot" button on the page.

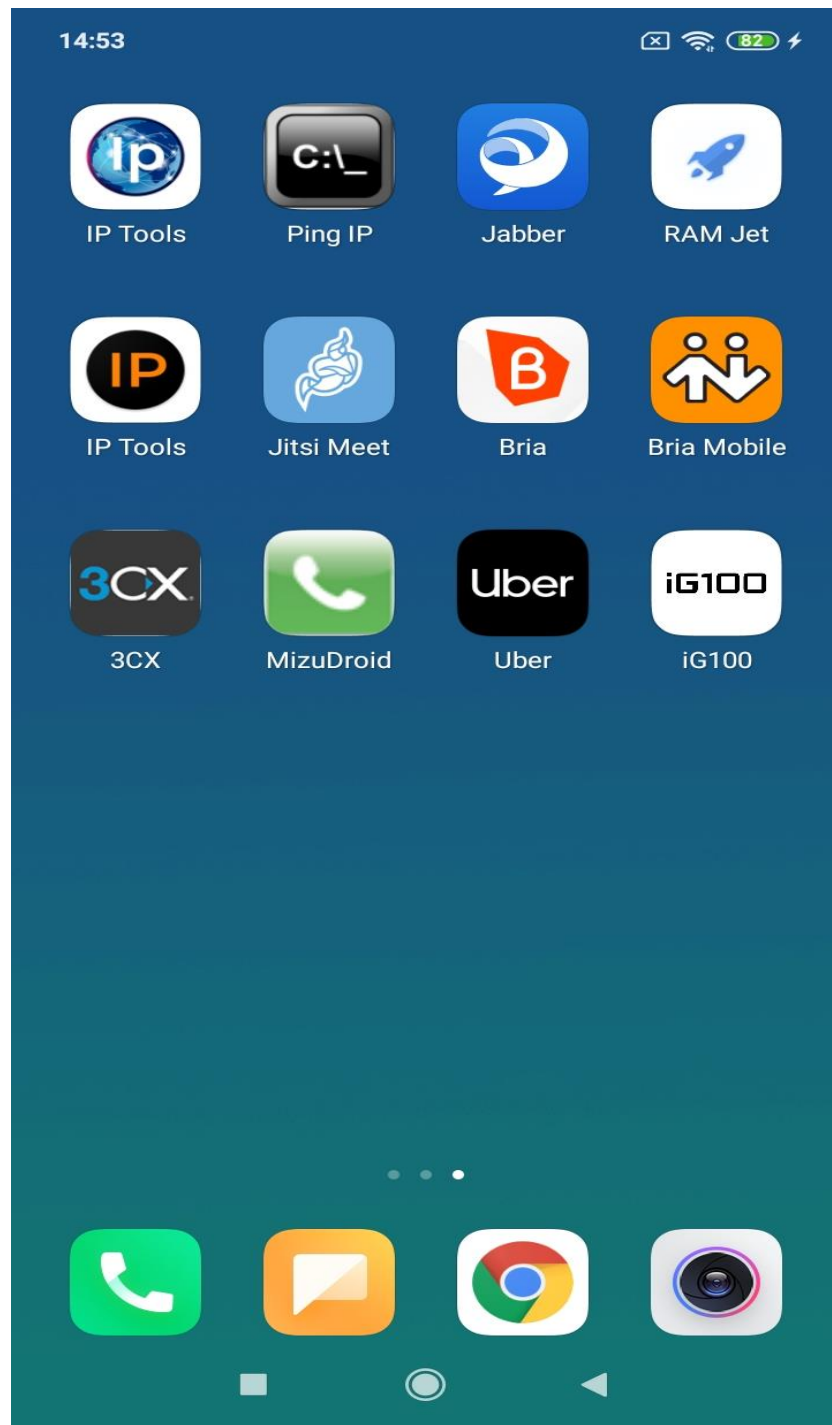


(Fig-12.10)

13 Connect to iG100 Android App

13.1 Login to the app

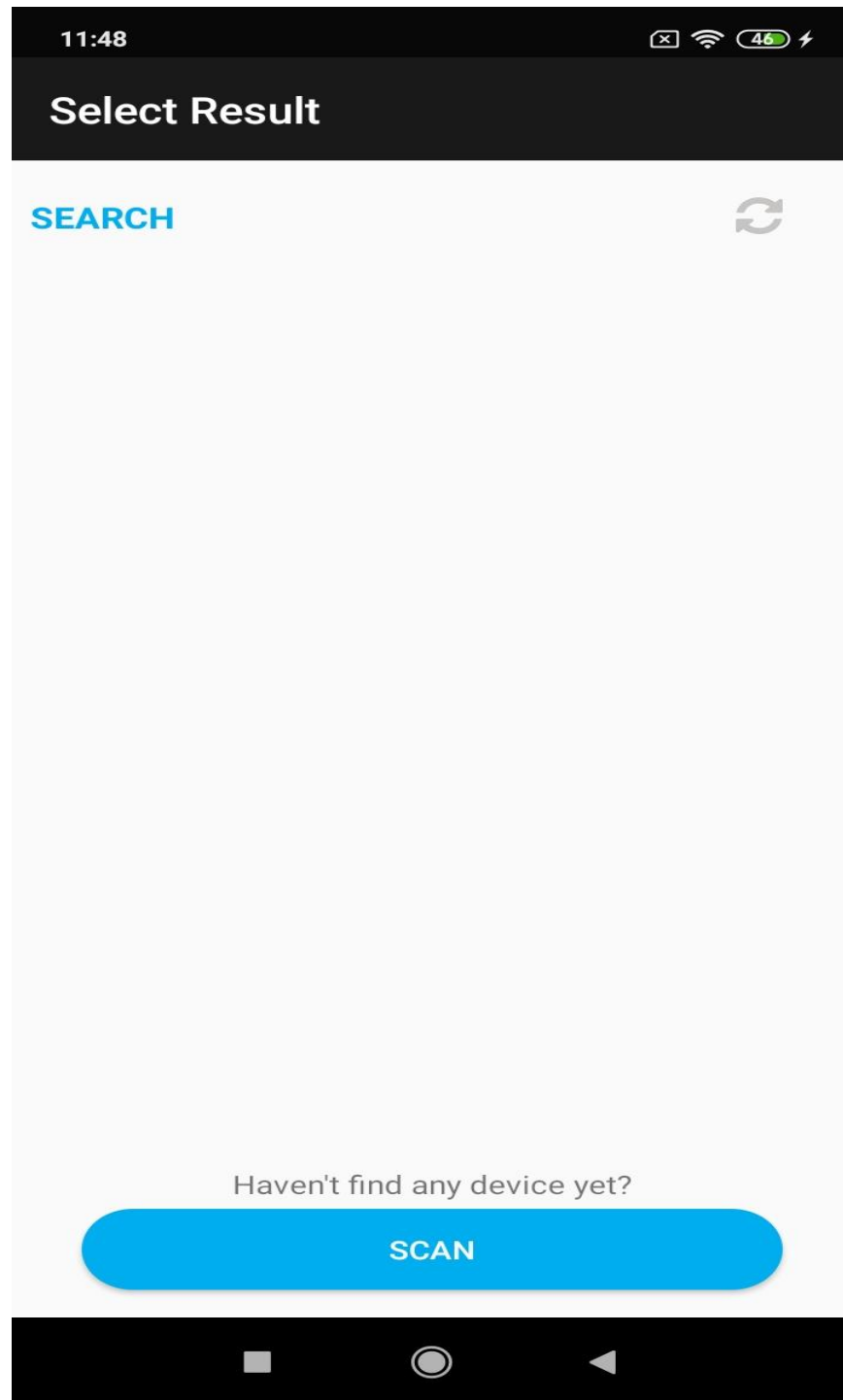
Step 1: Install the android app file. After installation, you will see the shortcut in your hand sate.



(Fig-13. 1)

Step 2: Check your Wi-Fi is connected with the same network of IG100 device.

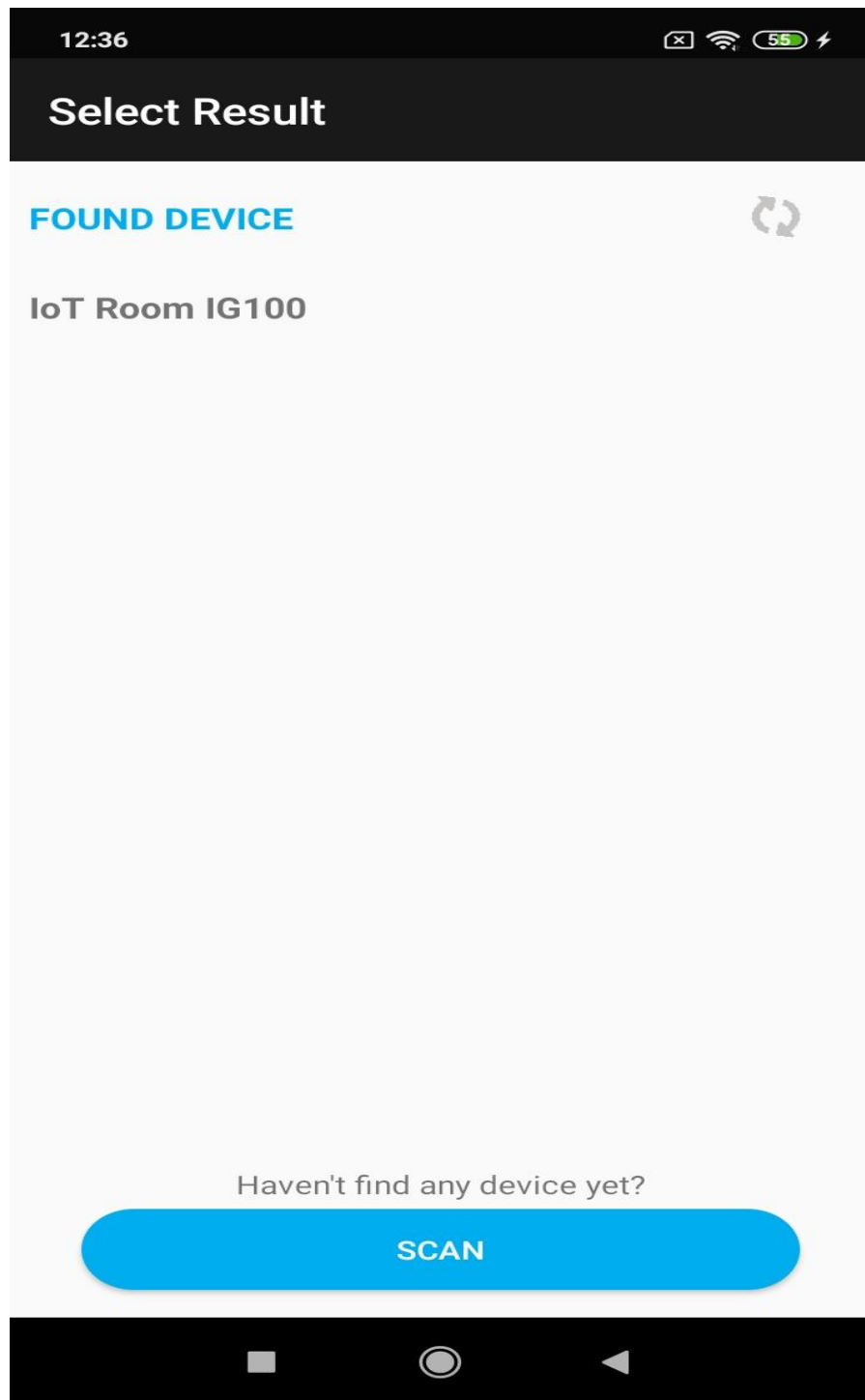
Step 3: Now tap to the IG100 Shortcut, then will show this window:



(Fig-13. 2)

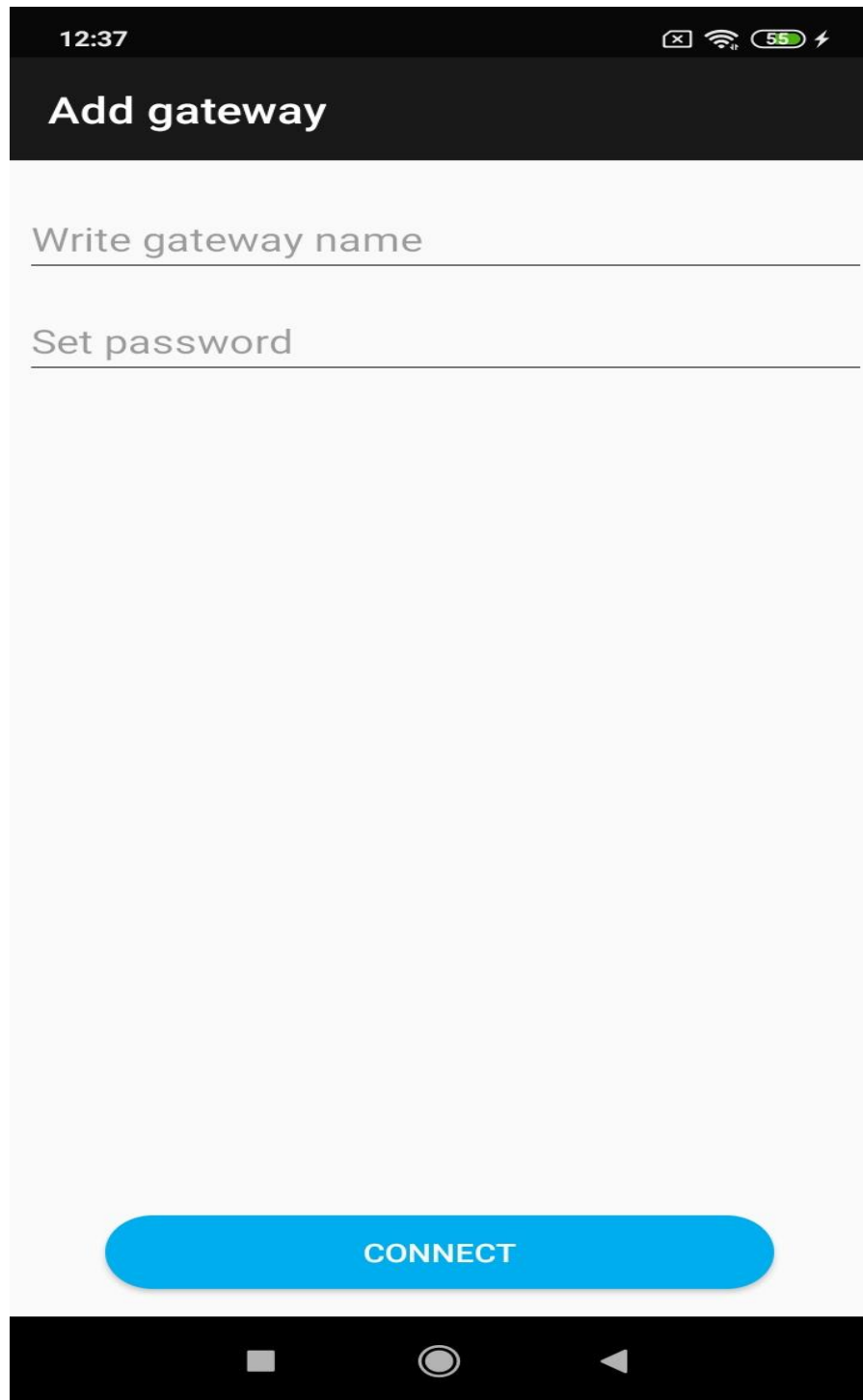
Step 4: Just click on the "SCAN" button for searching the gateway device near you with the same network. Wait until found the device.

Step 5: After found any device, please click on the device.



(Fig-13. 3)

Step 6: After clicking the founded device you will get the below window:



12:37

Add gateway

Write gateway name

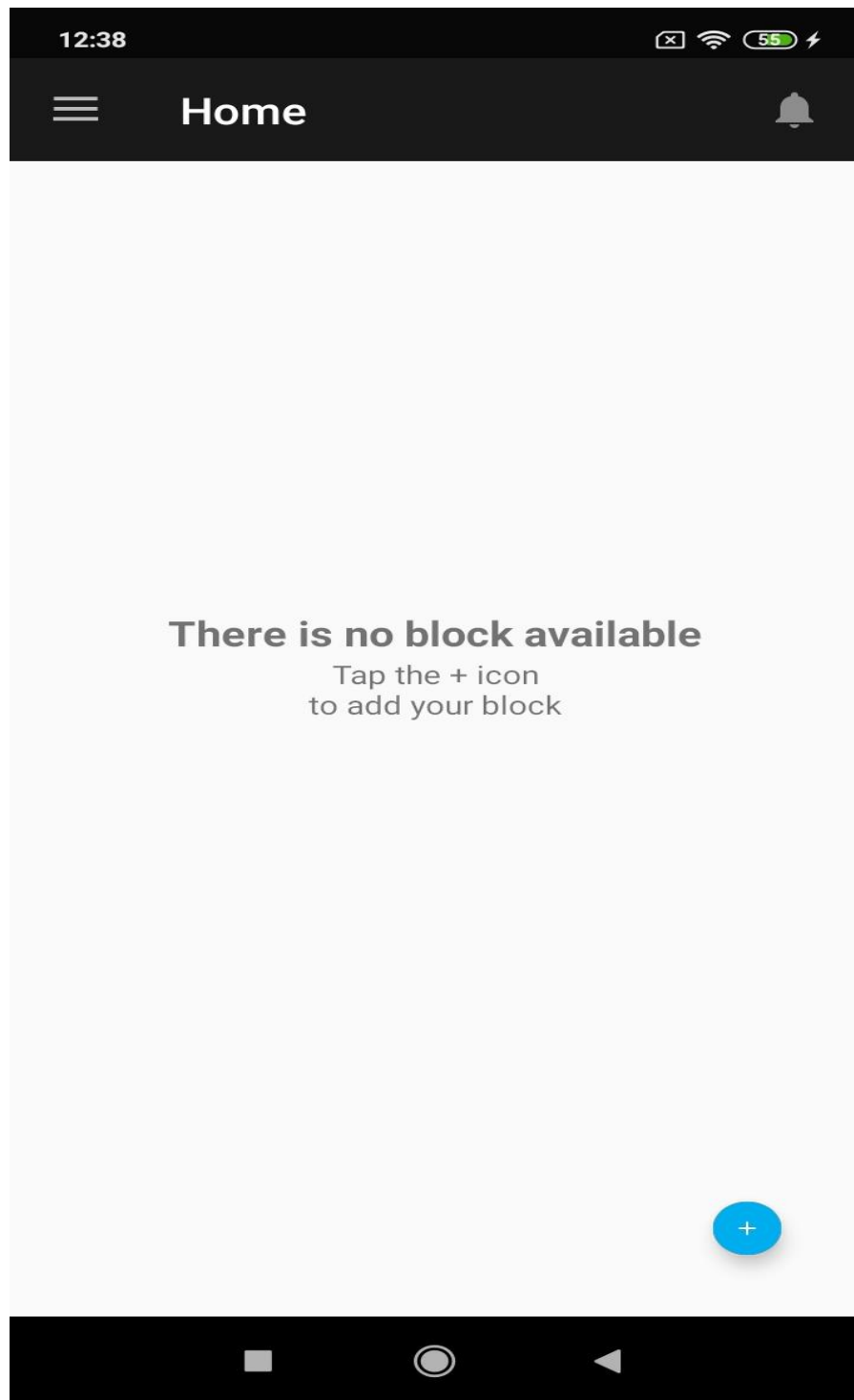
Set password

CONNECT

(Fig-13. 4)

Step 7: Here you need to enter the "Write gateway name" and "Set password". Then click on the "CONNECT" button.

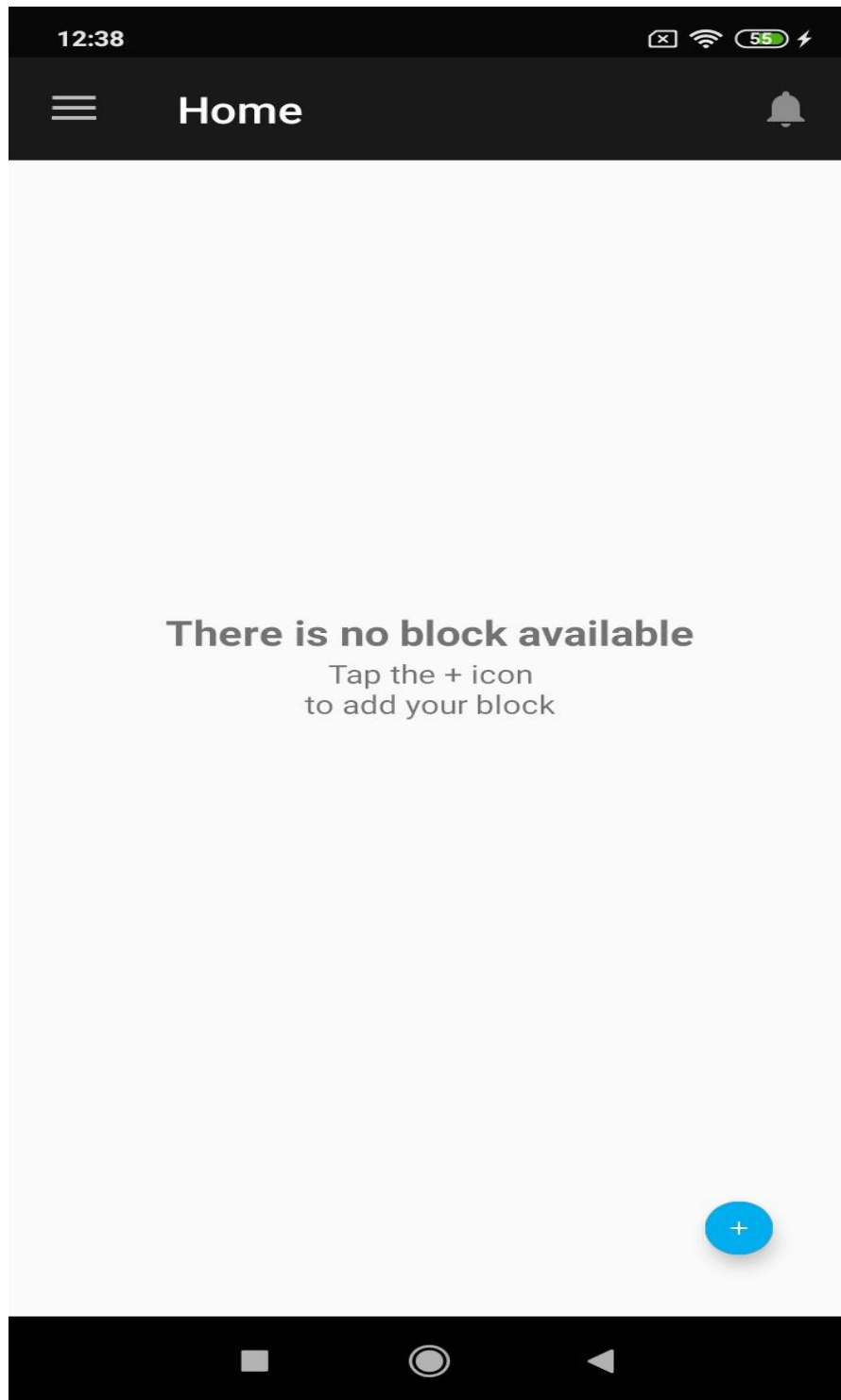
Step 8: That's it, now you are connected to the IG100 Gateway and populate this window:



(Fig-13. 5)

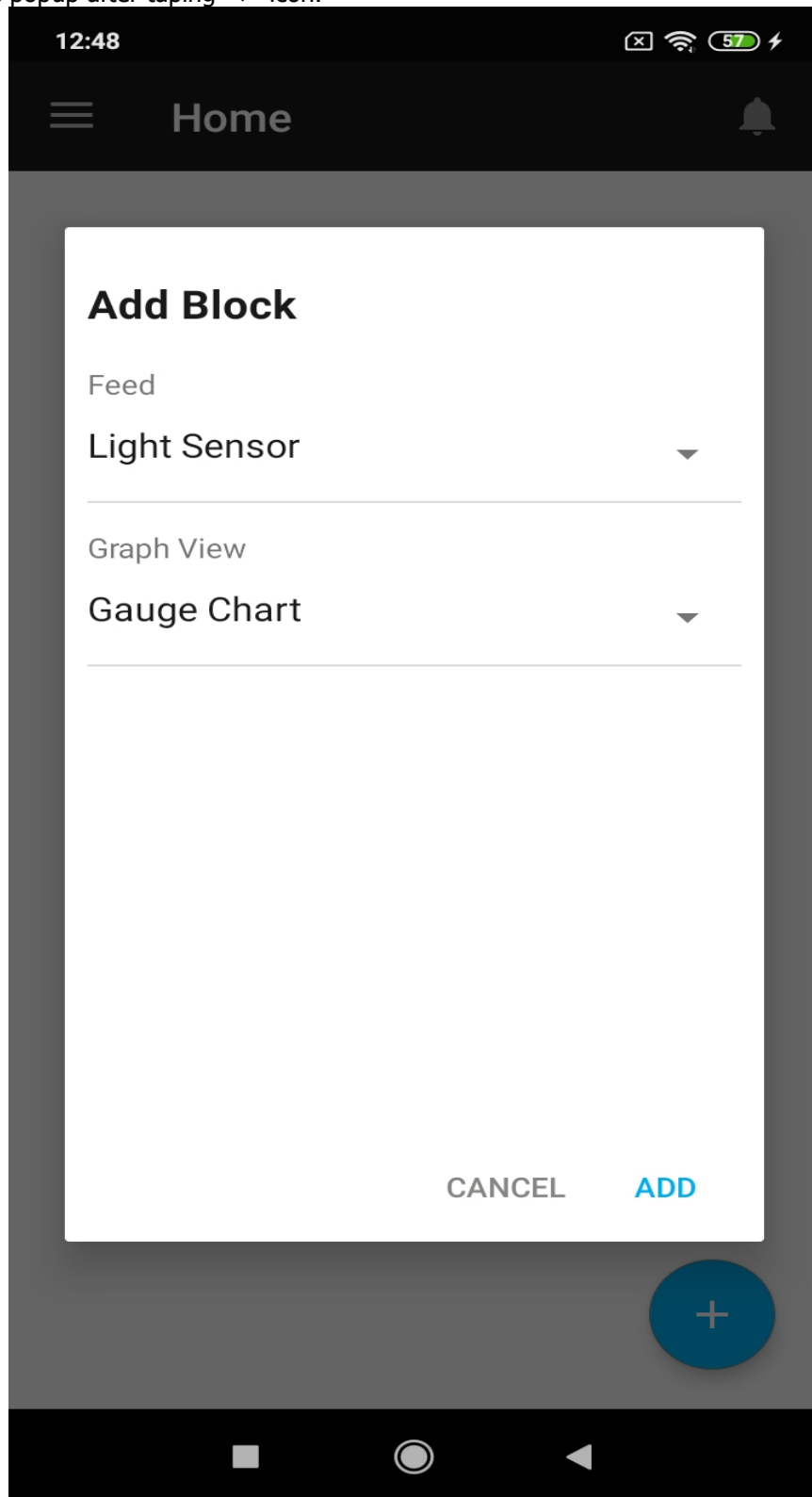
13.2 How to add Block

1. To add block, you need to tap to the “+” icon.



(Fig-13. 6)

2. Will get this popup after tapping "+" icon.

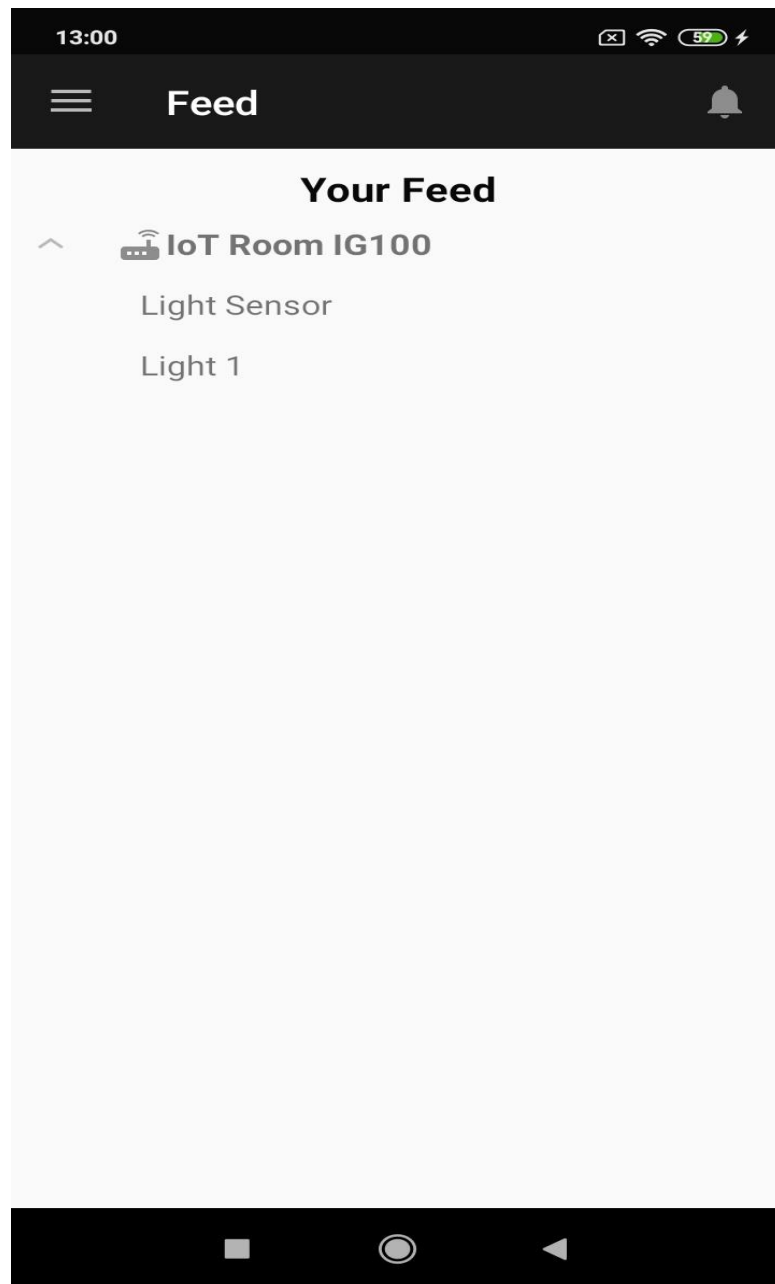


(Fig-13. 7)

3. Select a "Feed" and "Graph View" From the Drop-down list.
4. Then tap to the "ADD" button. multiple block can be added as your need.
5. After adding block, the screen will show like this:

13.3 View added feed

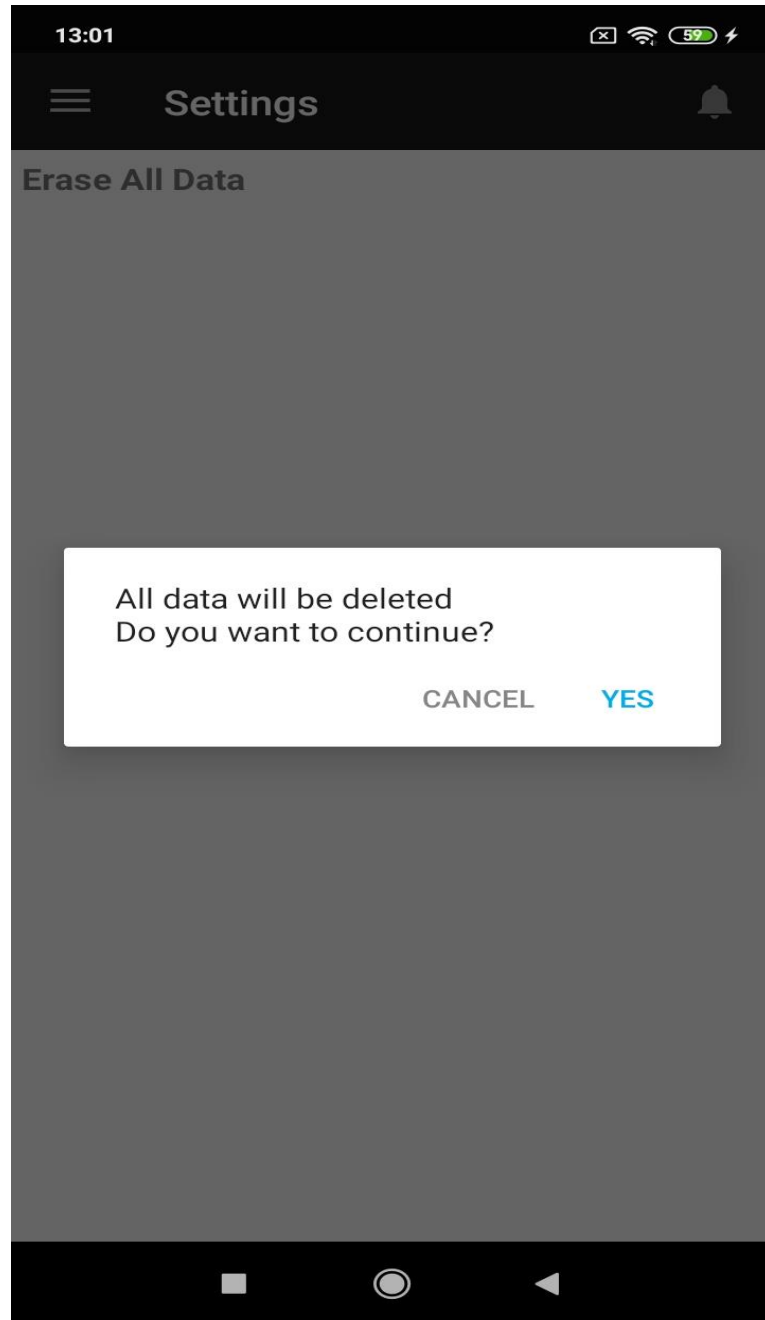
1. We can view the running added feed from the mobile app.
2. To show the feed, you need to tap menu and then tap to the "Feed". Will show this window:



(Fig-13. 8)

13.4 Settings

1. If you need to erase all configured data just open the "Settings" page from the menu.
2. Now you need to tap one the "Erase All Data" on the screen. You will get a confirmation message to delete all data.



(Fig-13. 9)

3. If you tap "YES" then all data will be deleted. You have to connect and add block from the beginning.

14 Summary

IG100 is an IOT gateway that is designed in such a way that a fairly wide range of various sensor inputs fit perfectly into it. It can make our home-maintenance and hence, our daily-life comfortable in numerous ways. This single gateway can be used to control multiple sensors all at once unlike any other. You can use it in your smartphone. Thus, no matter where we are roaming around, we can always look after our home. In a short, we are always at home! Lastly, it possesses the scope of shaping itself according to customers' needs as they evolve with time. Hence, the gateway can be modified according to any moderations in our homes or home appliances with the advancement of technology.

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