

IoT Portal

SENSE | MONITOR | CONTROL

Versatile, Scalable Sensor-to-Cloud Connectivity

IoT Portal Starter Kit Guide

Version 1.0

Issue Date: 14-02-2025

 **BRTSys**

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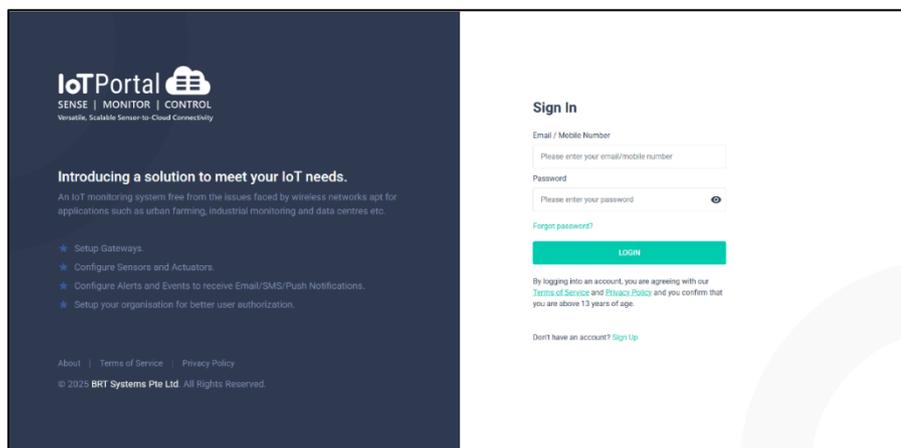
1. Introduction

Thank you for purchasing the IoTPortal Starter Kit. This guide aims to ensure that you have a smooth onboarding process with the starter kit. It will guide you through the following steps:

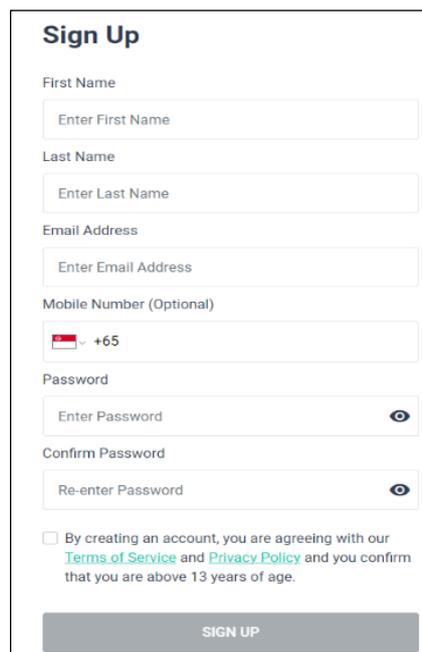
- Sign-up for an IoTPortal account
- Create an organisation
- Register and add a gateway
- Onboard a gateway
- Perform a gateway firmware update
- Adding LDSBus 4in1 Sensor to the system
- Claim your IoTPortal subscription

2. Sign-up for an IoTPortal Account

1. Use your browser and visit www.iotportal.com. You will be presented with the sign-up page.



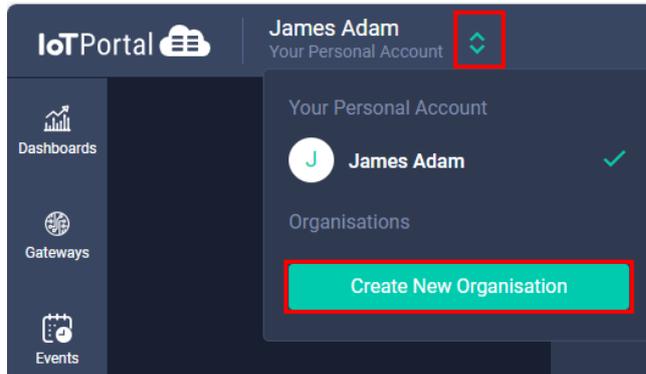
2. Complete the sign-up process and login.

A screenshot of the IoTPortal website's sign-up form. The form is titled 'Sign Up' and is contained within a white box with a thin border. It has the following fields: 'First Name' (input field with placeholder 'Enter First Name'), 'Last Name' (input field with placeholder 'Enter Last Name'), 'Email Address' (input field with placeholder 'Enter Email Address'), 'Mobile Number (Optional)' (input field with a dropdown menu showing '+65'), 'Password' (input field with placeholder 'Enter Password' and an eye icon to toggle visibility), and 'Confirm Password' (input field with placeholder 'Re-enter Password' and an eye icon to toggle visibility). Below the password fields is a checkbox with the text: 'By creating an account, you are agreeing with our Terms of Service and Privacy Policy and you confirm that you are above 13 years of age.' At the bottom of the form is a grey 'SIGN UP' button.

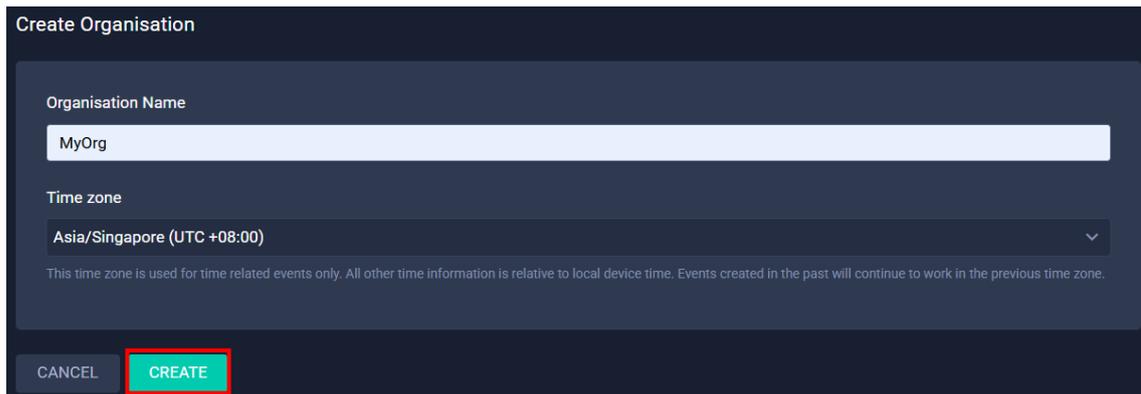
3. Create an organisation

A gateway may be registered and onboarded to your personal account or to an organisation. A gateway registered to an organisation allows it to be managed by other users who are part of the organisation. In this example, we shall create an Organisation called **MyOrg**.

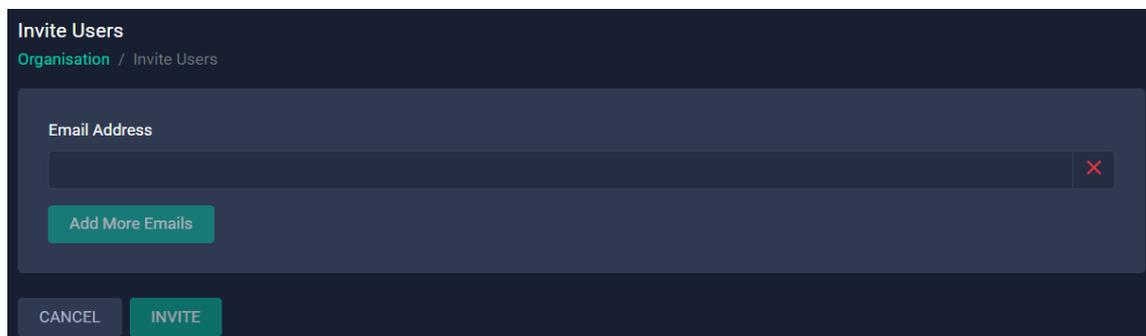
1. Upon successful login, you will be presented with the following screen. Click on the Personal Account box and select [**Create New Organisation**].



2. Fill in the organisation name, time zone and select [**Create**].

The screenshot shows the 'Create Organisation' form. It has a text input field for 'Organisation Name' containing 'MyOrg' and a dropdown menu for 'Time zone' set to 'Asia/Singapore (UTC +08:00)'. Below the form is a 'CANCEL' button and a 'CREATE' button highlighted in a red box. A small note at the bottom of the form states: 'This time zone is used for time related events only. All other time information is relative to local device time. Events created in the past will continue to work in the previous time zone.'

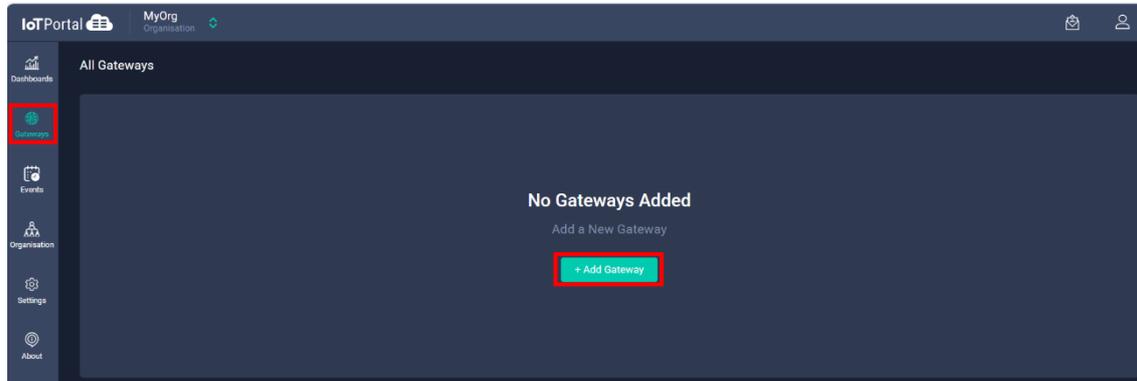
3. Upon successful creation, you have a choice to invite users to your new organisation. Select [**Cancel**] to skip this step. You can return to it later by selecting Organisation on the left menu.

The screenshot shows the 'Invite Users' form. It has a text input field for 'Email Address' with a red 'X' icon on the right. Below the input field is an 'Add More Emails' button. At the bottom of the form are 'CANCEL' and 'INVITE' buttons, with 'INVITE' highlighted in a red box.

4. Register a Gateway

Now we are ready to register a gateway into the selected organisation.

1. Select Gateways on the left menu and click on the [+ Add Gateway] button.



Add Gateway

UUID
Gateway UUID must be 19 characters long.

Serial Number
Serial Number must be 8 characters long.

Ethernet MAC Address
Ethernet MAC Address must follow XXXX:XXXX:XXXX:XXXX.

Gateway Name
Please enter a valid name for gateway (min 1 char and max 32 chars, do not include special characters)

CANCEL SAVE

2. The required details of the gateway can be found on the back of the gateway. On the label:
 - Product Key is the same as Serial Number
 - ETH ID is the same as Ethernet MAC Address. Please enter with colons and all CAPS

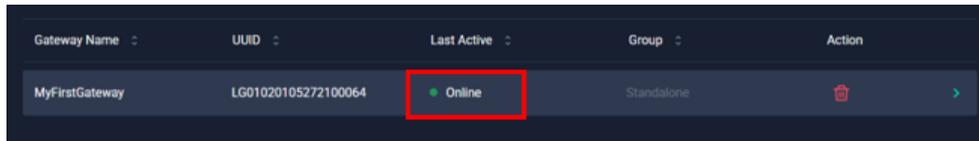


3. Enter a suitable Gateway Name, e.g. MyFirstGateway.
4. Tap on [**Save**] to complete the registration.
5. Once the gateway has been registered, it will be shown on the gateways listing page. The **Last Active** column will indicate that it is **Not Onboarded**. This means that the gateway has not been connected to the IoTPortal.



Gateway Name	UUID	Last Active	Group	Action
MyFirstGateway	LG01020105272100064	Not On-boarded	Standalone	 

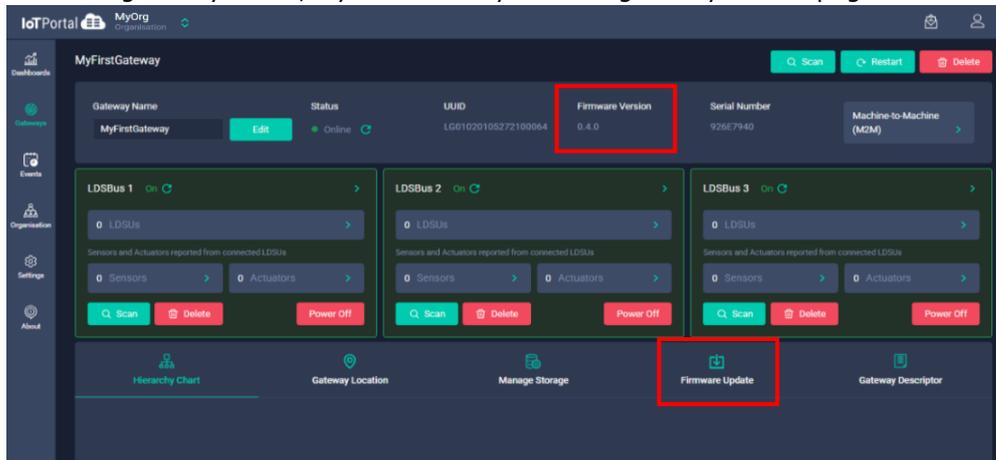
6. Connect the gateway to an Ethernet network.
7. Attach the PSU and power up the gateway. The PWR LED will light up in **RED** to indicate power is supplied to the gateway. The NET LED will go through the following color changes; **BLUE** flashing -> **BLUE** stable -> **GREEN** flashing -> **GREEN** stable.
8. Once the NET LED is **GREEN** stable, refresh the gateways listing page. The Last Active column will now indicate that the gateway is **Online**.



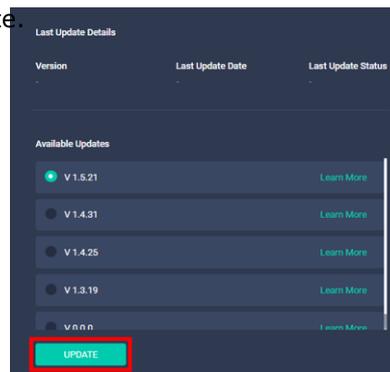
Gateway Name	UUID	Last Active	Group	Action
MyFirstGateway	LG01020105272100064	Online	Standalone	 

5. Gateway Firmware Update

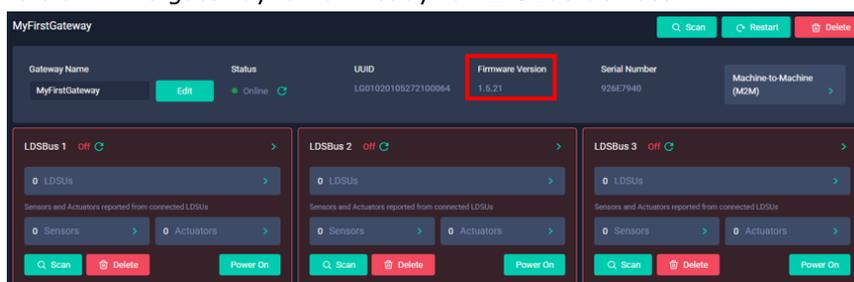
1. Click on the gateway name, MyFirstGateway and the gateway details page will be displayed.



2. Note that the firmware version is 0.4.0 which is the factory default. We must update the firmware to work with the LDSBus 4in1 Sensor.
3. Tap on **[Firmware Update]**.
4. Select the latest firmware version, for example, V1.5.21 as shown below. Click on **[UPDATE]** to begin the firmware update.

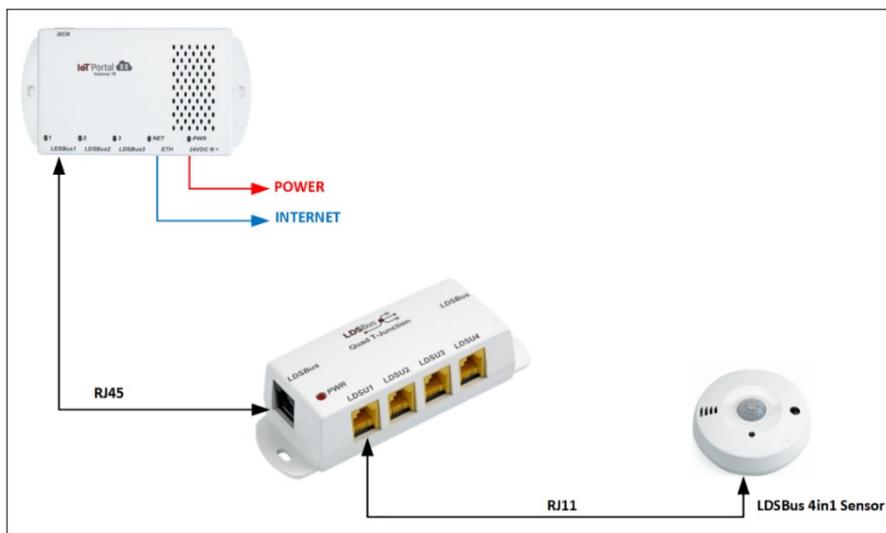


5. Refresh the page. Check the Last Update Status and it will indicate In-progress.
6. On the gateway, the NET LED will change to **YELLOW** flashing for about 2 minutes while the firmware is downloaded from the IoTPortal to the gateway.
7. Once the firmware is downloaded, the NET LED will change to **RED** stable and the LDSBus Port LEDs will change to **RED** flashing to indicate firmware programming is in progress. When this is complete, the gateway will restart.
8. Once the NET LED is **GREEN** stable, refresh the browser page a few times to see the updated firmware version . The gateway is now ready for LDSBus devices.



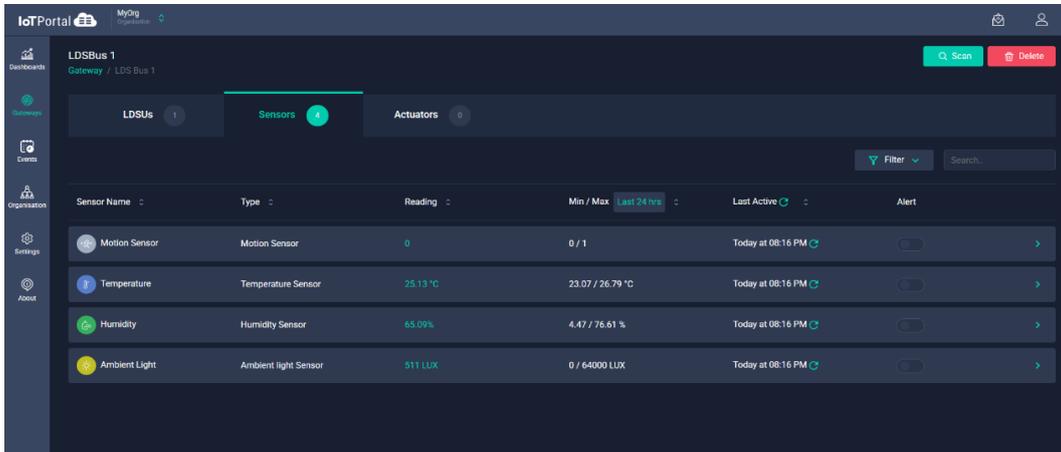
6. Adding the LDSBus 4in1 Sensor

1. Power off the gateway.
2. The diagram below shows the required connections. Refer to Sensors and Actuators QSG for IoTPortal at [Website link](#) for more information.
3. Attach the LDSBus 4in1 Sensor to the LDSBus Quad T-Junction.
4. Attach one end of an RJ45 cable to the gateway LDSBus Port 1 and the other end to one of the RJ45 connectors of the Quad T-Junction.
5. Power on the gateway and wait for the gateway to become online (NET LED to reach **GREEN** stable). The LED on the LDSBus Quad T-Junction will also be lit and the status LED on the 4in1 sensor will also flash periodically.



6. Once the gateway is online, go to the gateway details page.

7. LDSBus1 status will be ON, 1 LDSU and 4 sensors will be indicated.
8. The gateway connection chart will show that an LDSBus 4in1 Sensor has been discovered.
9. In the gateway details page, click on the *Sensors* tab to view the readings from the 4 sensors.



7. Claim your IoTPortal Subscription

The IoTPortal Starter Kit comes with a 3-month IoTPortal Subscription. To activate the subscription, you require a Customer ID (CID) and a Project Reference Number (PRN). Contact sales@brtsys.com if a CID and PRN has not been mailed out to you.

1. Sign in to www.iotportal.com using your registered credentials.

Sign In

Email / Mobile Number

Please enter your email/mobile number

Password

Please enter your password

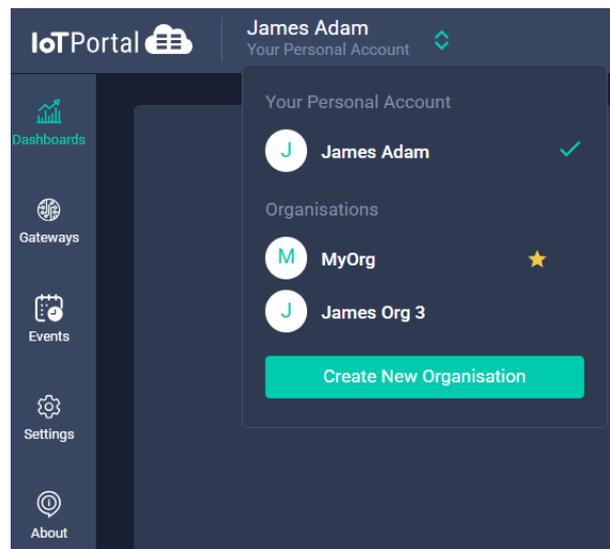
[Forgot password?](#)

LOGIN

By logging into an account, you are agreeing with our [Terms of Service](#) and [Privacy Policy](#) and you confirm that you are above 13 years of age.

Don't have an account? [Sign Up](#)

2. Switch to your personal account or **MyOrg** to access the subscription option.

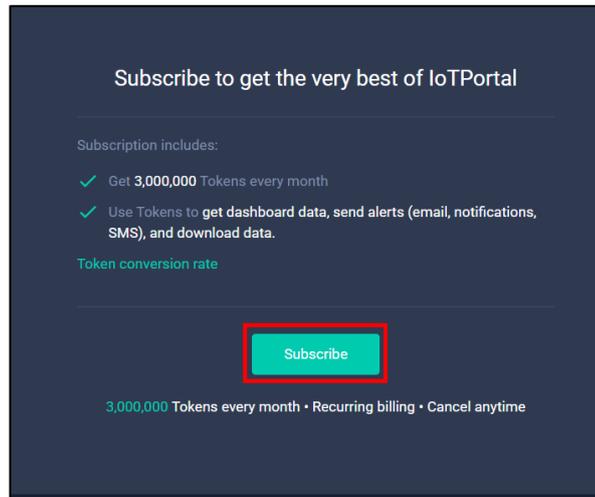


3. Click [**Subscribe Now**].

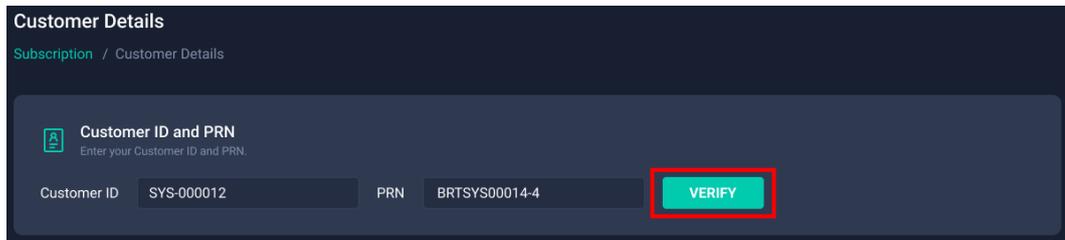


Note: The [**Subscribe Now**] button is displayed when you are in your own personal account or in organisations that you have created.

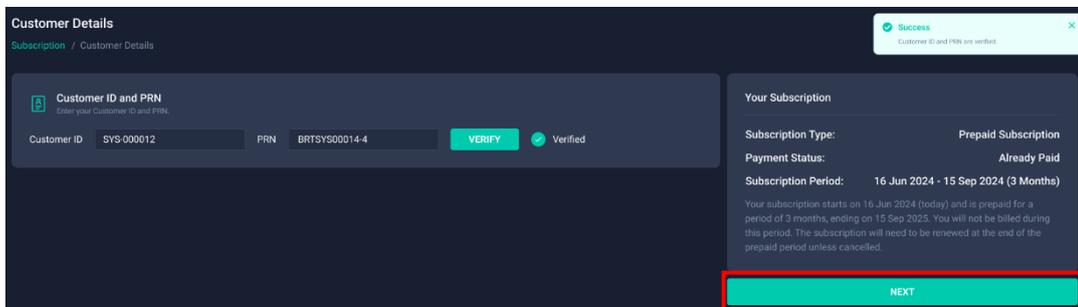
- Click [**Subscribe**].



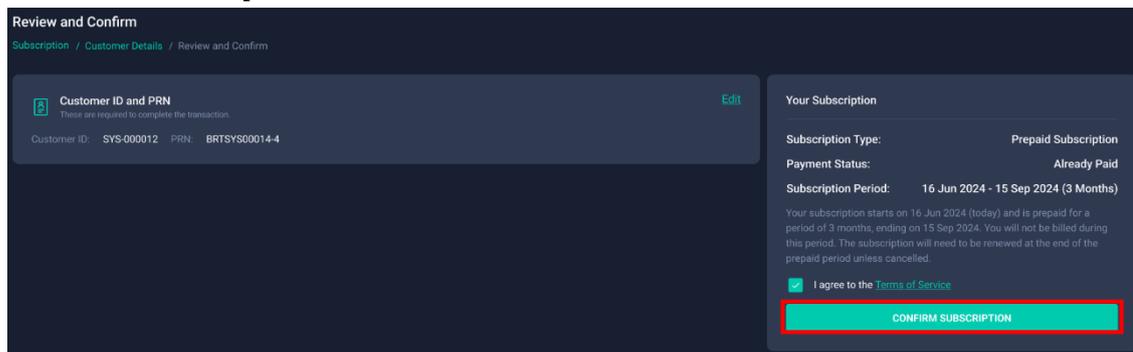
- Enter your Customer ID and PRN information. Contact sales@brtsys.com if you have not received them. Click [**VERIFY**].



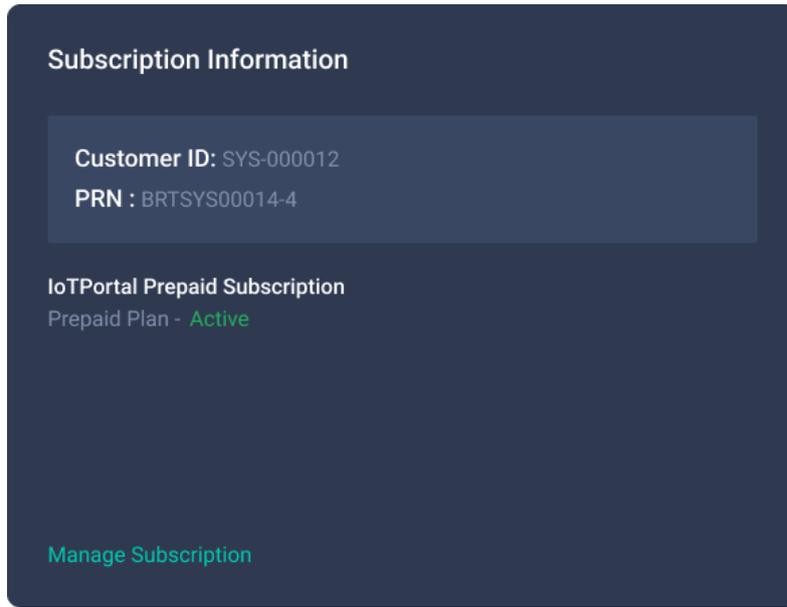
- Once details are verified, click on [**NEXT**] to continue.



- Subscription details are displayed. Go through the *Terms of Service* (by clicking on the link) and accept it by clicking on the check box. To continue click on [**CONFIRM SUBSCRIPTION**].



- Subscription details are displayed.



The screenshot shows a dark blue card with the following content:

- Subscription Information**
- Customer ID: SYS-000012
- PRN : BRTSYS00014-4
- IoTPortal Prepaid Subscription
- Prepaid Plan - **Active**
- [Manage Subscription](#)

8. Your IoTPortal Setup is Ready: What's Next?

Congratulations! You have reached the end of this guide. You may start exploring the various services of the IoTPortal, e.g. invite other members to your organisation, creating your first dashboard, setting up an alert, creating an automation, or offloading data from the IoTPortal.

For the complete User Guide to IoTPortal, refer to BRTSYS_AN_033_IoTPortal-User-Guide---Portal-Web-Application-WMC at [Website link](#).

If you have been unable to complete any of the foregoing steps, please contact us immediately at support@brtsys.com.

For feedback on this document click the Document Feedback link below.

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Revision	Changes	Date
1.0	Initial Release	14-02-2025