InstaGen Monitoring Platform Introduction

01 Overview

InstaGen Monitoring Solutions

InstaGen Cloud

InstaGen Cloud is Insta‘s self-developed official monitoring platform for end-users and distributors to monitor and manage their devices and plants. It features rich functions such as 24-hour load monitoring and devices and plants management, remote configuration and upgrading, organization management, alarms information, etc.

https://www.insta-cloud.co.uk/

InstaGen APP

InstaGen APP has the portable version of the platform, allowing people to install it on their phones for monitoring and management of their devices and plants anytime, anywhere.

02 InstaGen Cloud

InstaGen Monitoring Platform

Sign-in Page

- Choose the language
- Create an “Owner Account”

Plant Page

- Create a new plant
- View Plant’s Real-time Generation & Consumption
- Add devices to plant
- View Device Data & Export a Data Report

Device Page

- Configure the device
- View the device log
- Remote upgrade firmware

Alarm Page

- View the detailed information on alarms

Report Page

- Export a plant data report

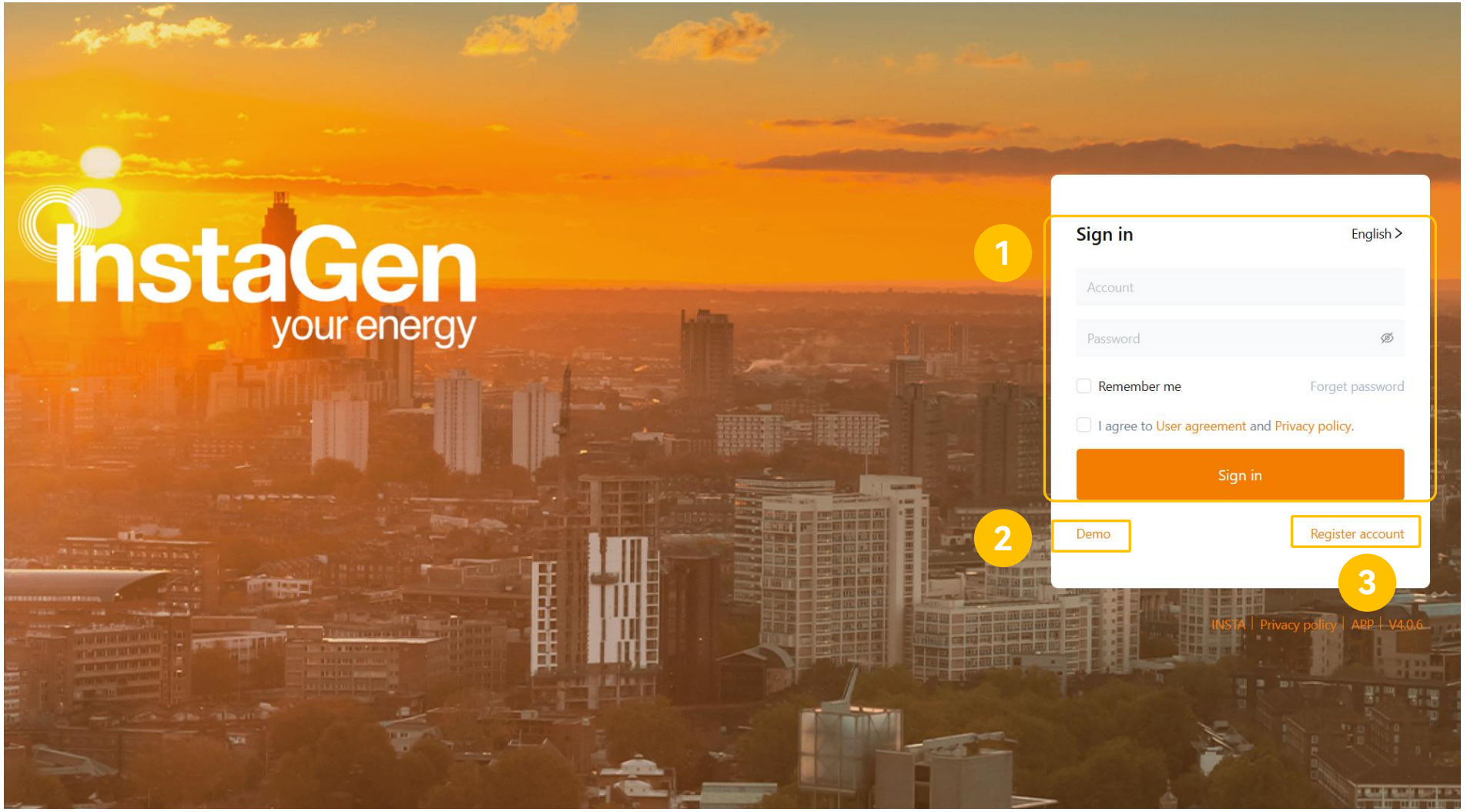
Manage Page

- Create a subordinate organization account
- Create an internal account & limit the scope of jurisdiction
- Set the push method of alarms

- Feedback Function

InstaGen Cloud Main Pages

Main Page - Sign-in Page

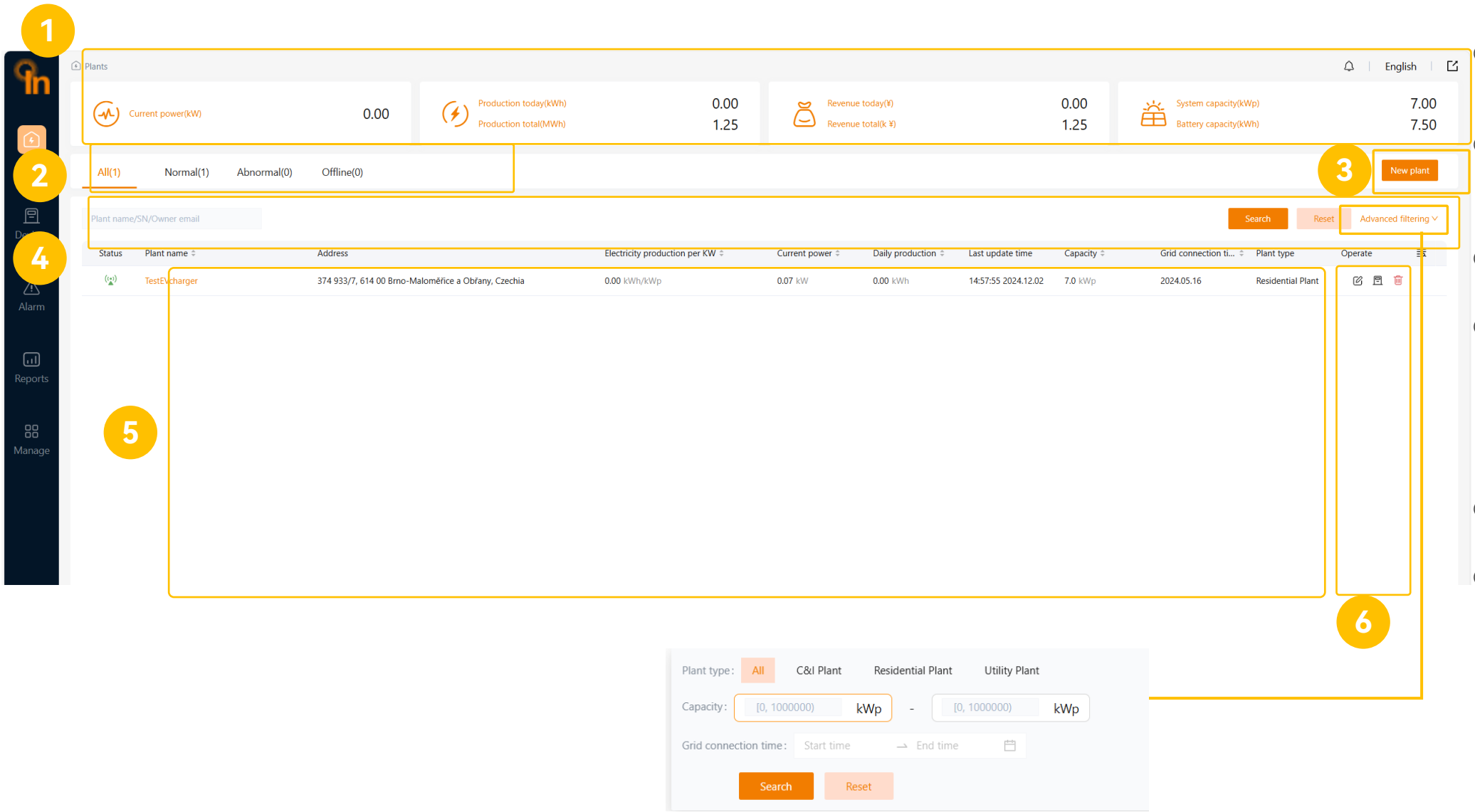


① Sign in by account and password.

② InstaGen Cloud provides a demo account. Users can directly access the platform and experience its basic functions through the demo account.

③ Owner users can through the sign-in page to create the owner account.

Main Page - Plant Page



① Power plant system performance by different counting periods.

② Quickly distinguish between power plants that are normal operating, abnormal, and offline.

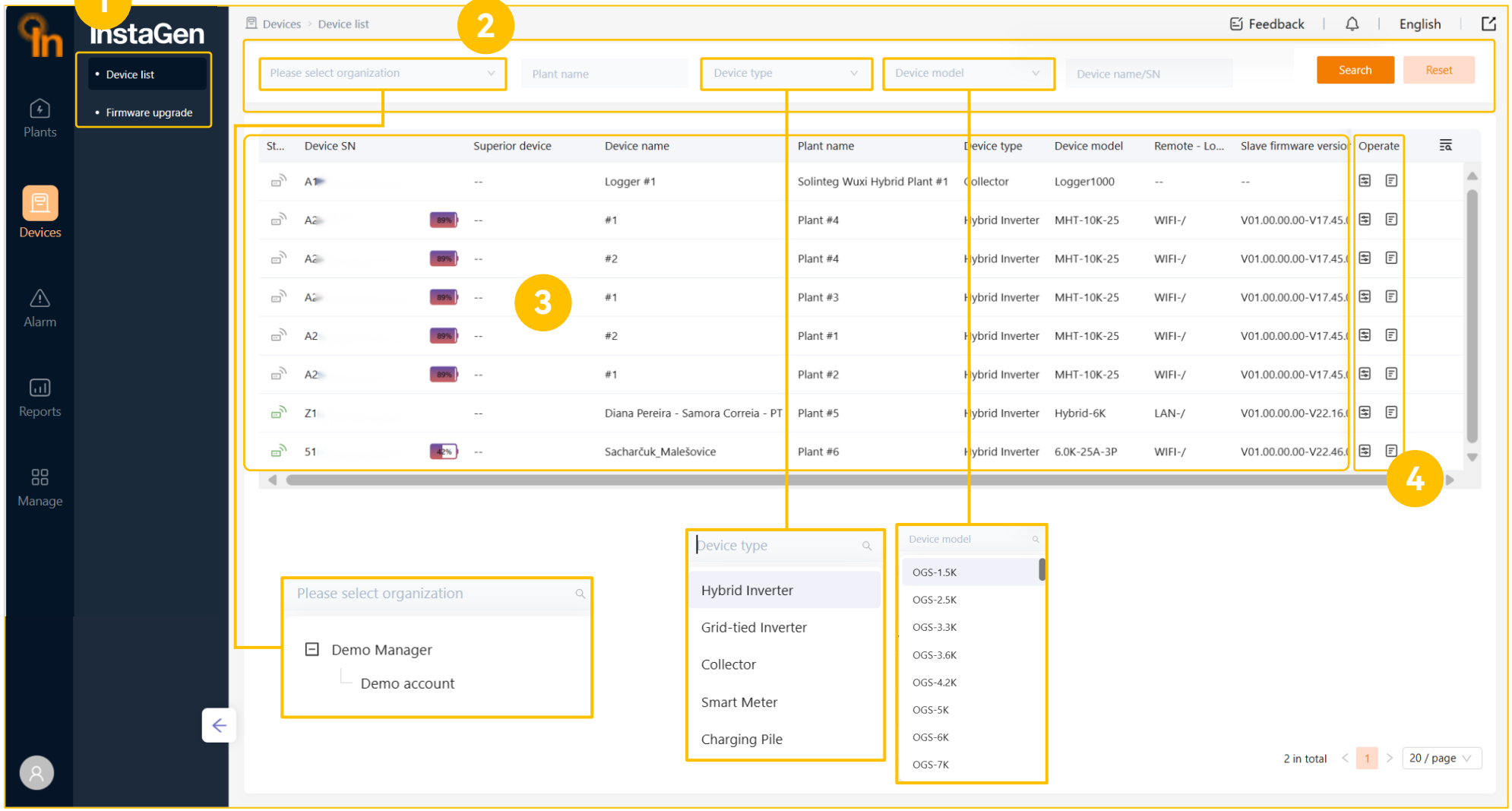
③ Through this button can create a new plant.

④ Search for power plants through plant name, owner email, organization name, and advanced filtering options such as plant type, capacity, and grid connection time.

⑤ Detail information about the plant.

⑥ The operations that can be performed on a power plant, from left to right, are as follows: Modify, to modify the plant information; Devices, to redirect to the devices page; Delete, to remove the power plant.

Main Page - Devices Page (Device list)



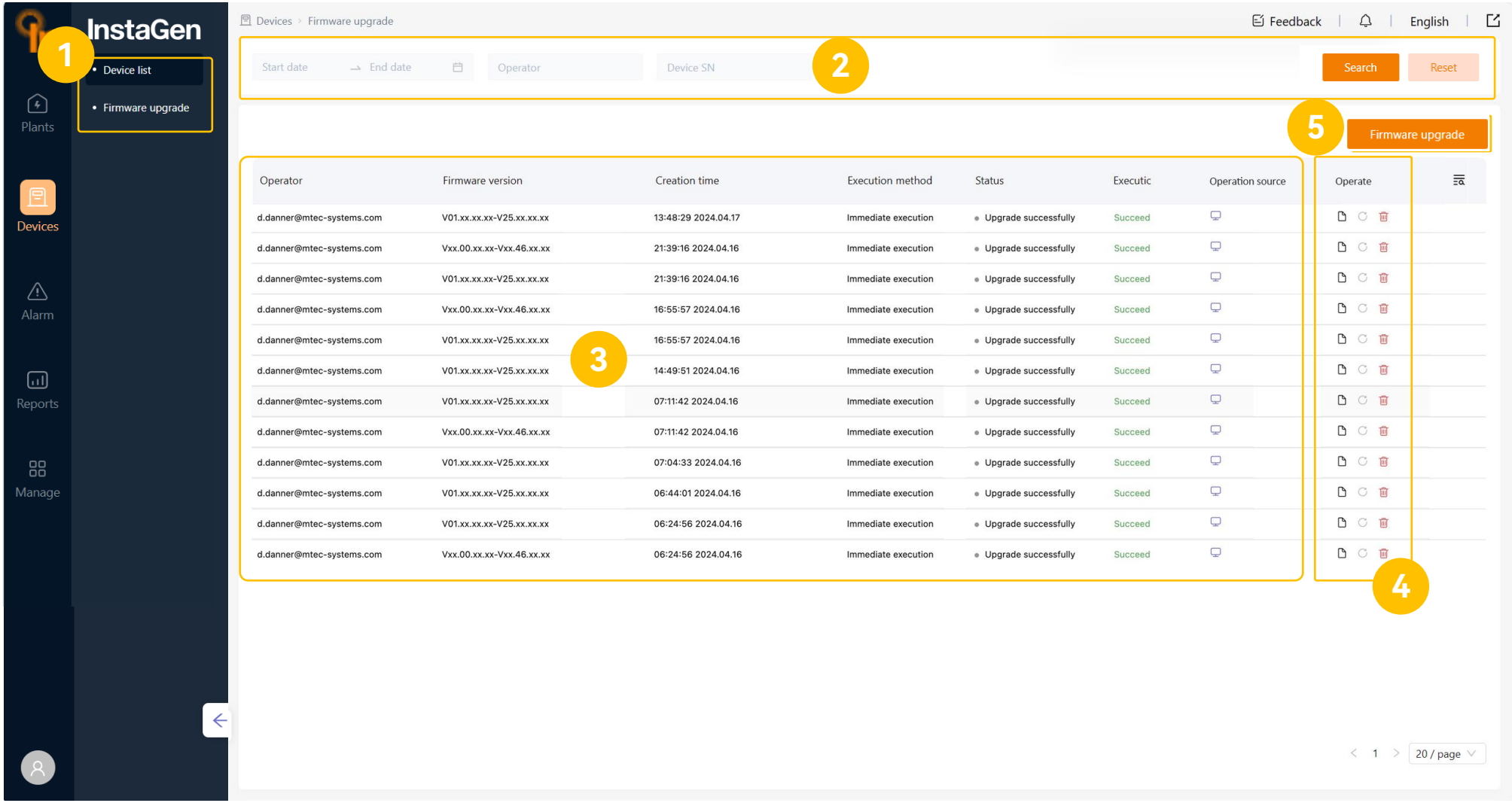
① The Device Page has two sub-interfaces: "Device List" and "Firmware Upgrade". The current page is "Device List".

② Conduct searches by using various criteria such as the organization they belong to, the plant they are associated with, the device name, the type of device, and the model of the device.

③ Devices list and detailed information.

④ Operations of device - configure and device log.

Main Page - Devices Page (Firmware upgrade)



① The Device Page has two sub-interfaces: "Device List" and "Firmware Upgrade". The current page is "Firmware upgrade".

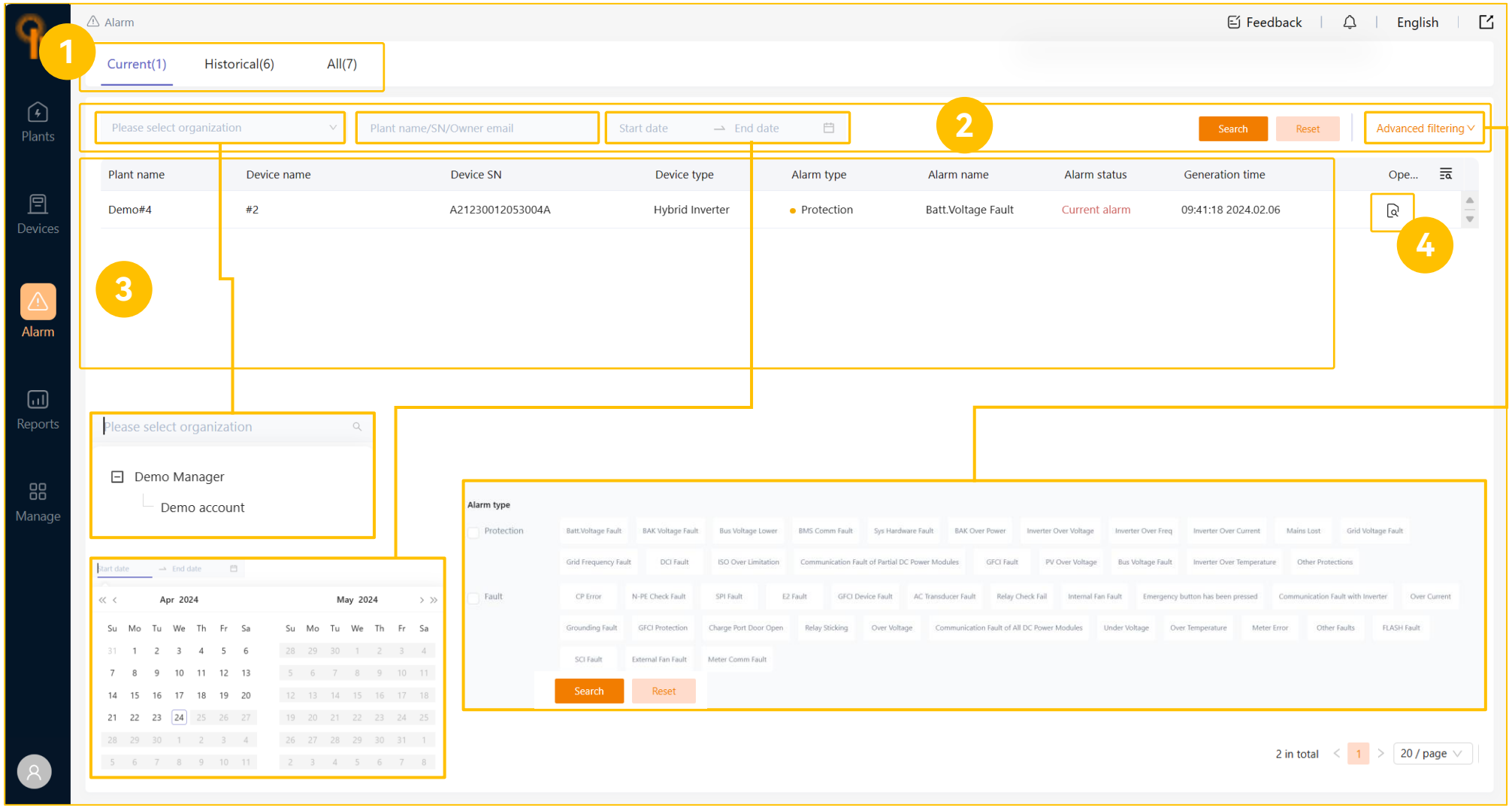
② Search for historical upgrades through start&end time, operator or device SN code.

③ Detail information on historical upgrades or scheduled upgrades.

④ Operations for upgrades. From left to right, detail information, refresh and delete.

⑤ Through this button to arrange firmware upgrades.

Main Page - Alarm Page



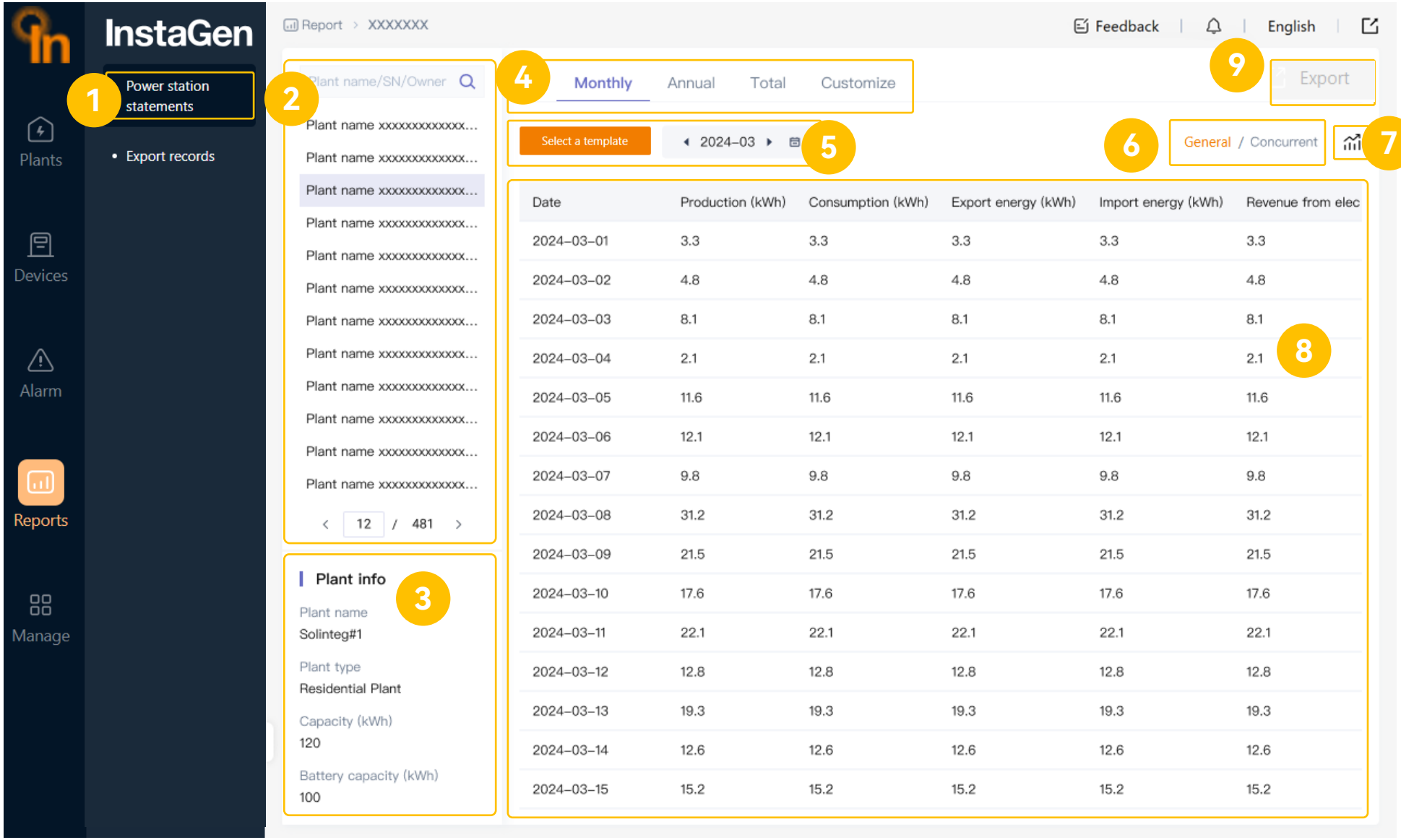
① View current, historical, as well as all alarm messages.

② Search for alarm through organization name, plant name, time, and it also supports searching for alarm through more detailed protection or fault names.

③ Detail information of alarms.

④ Through this button can view more detailed information of the alarm, including possible causes and repair suggestions.

Main Page - Report Page(Plant report)



① The Report Page has two sub-interfaces: "Plant report" and "Export records". The current page is "Plant report".

② Search for and view subordinate power plants.

③ Display the detailed information of the selected plant.

④ Click here can select the time dimension for statistics - monthly/annual/total/custom.

⑤ Click here can choose the items to report through a template and also select the time period for the statistics.

⑥ Can choose “General” or “Concurrent” statistical method.

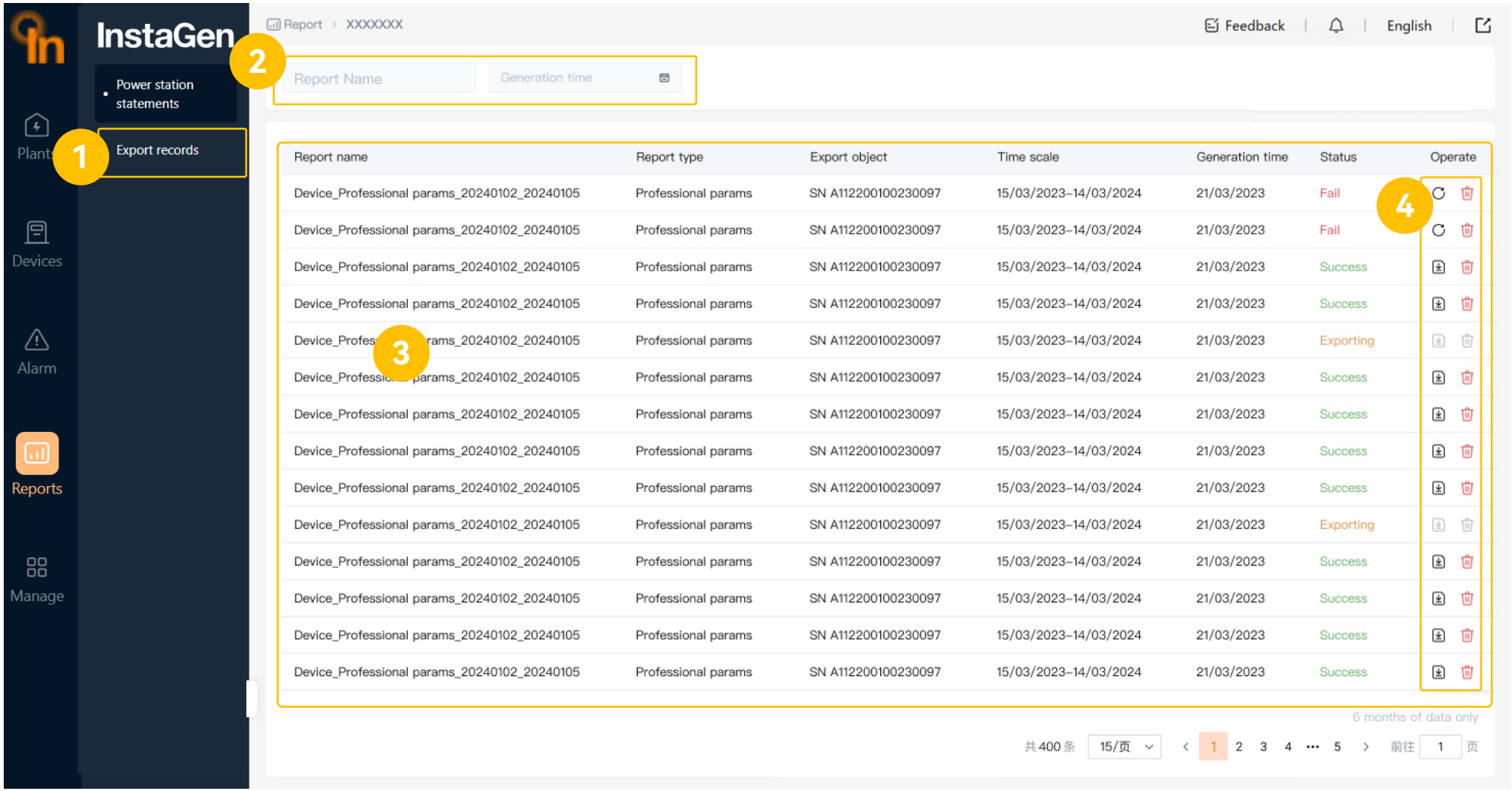
⑦ Can switch between the table and bar chart display methods.

⑧ Detail information of the report.

⑨ Export the report.

*The page may change with updates, please refer to the actual website for the latest version.

Main Page - Report Page(Export records)



① The current page is "Export records".

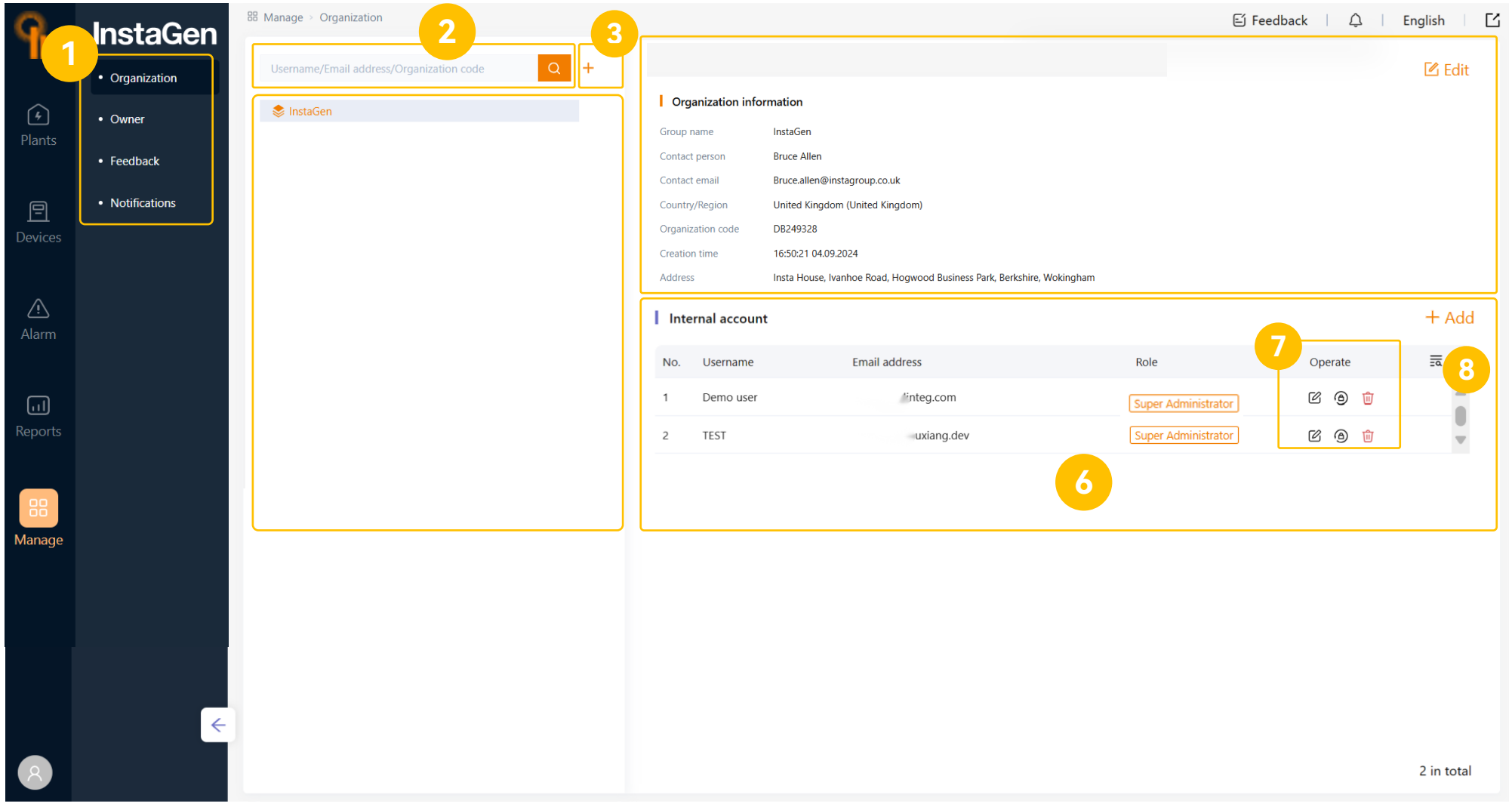
② Search for reports through report name and generation time.

③ Detail information of reports.

④ The operation for reports, including re-generate, download, and delete.

*The page may change with updates, please refer to the actual website for the latest version.

Main Page - Manage Page(Organization)



① The Manage Page has three sub-interfaces: “Organization”, “Owner” and "News Center". The current page is “Organization".

② Search for an organization by username, email address or organization code.

③ Through this button can create a sub-account.

④ Display various organizations and their affiliations.

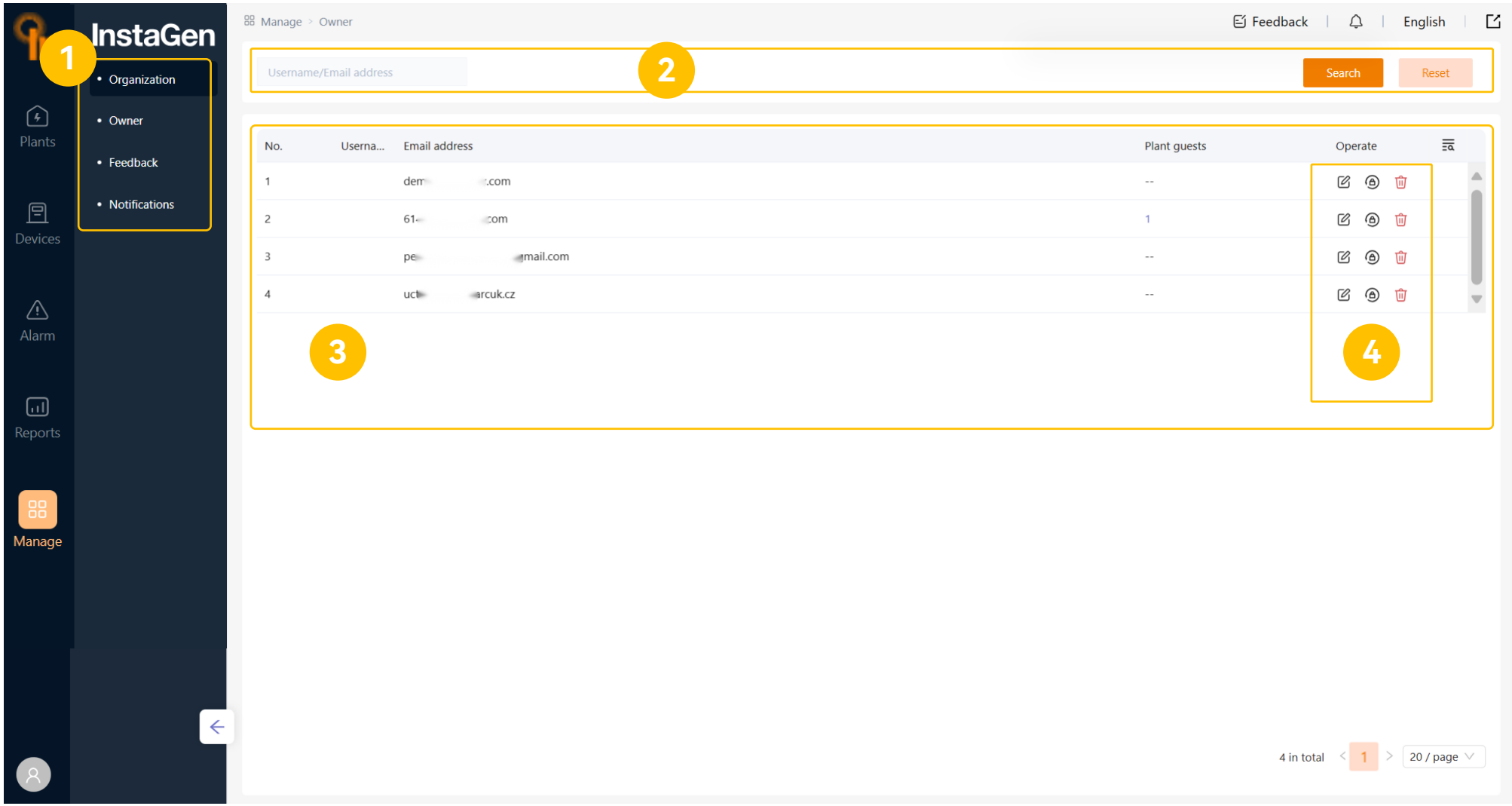
⑤ Display the information of the organization.

⑥ Display the internal accounts under this account.

⑦ Modify/Reset password/Delete.

⑧ Through this button add a new internal account.

Main Page - Manage Page(Owner)



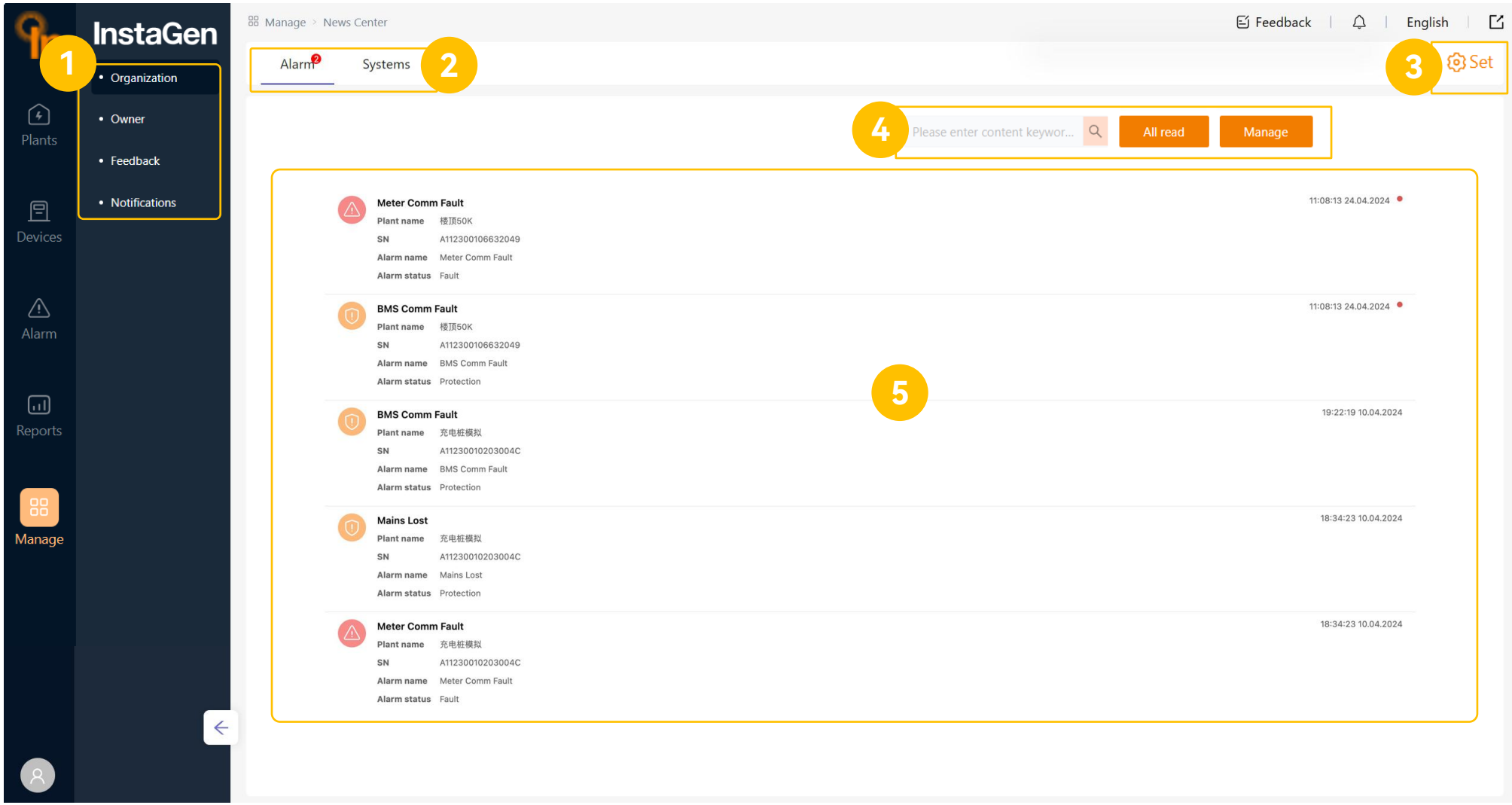
① The current sub-page is "Owner".

② Search for owner users by username and email address.

③ Display the information of owner users.

④ Operations to the owner account, from left to right, are: modify - change the email address, reset the password, and delete the owner user.

Main Page - Manage Page(News Center)



① The current sub-page is “Notifications".

② Notifications are divided into alarms and system messages.

③ Through this button set the push method of alarms.

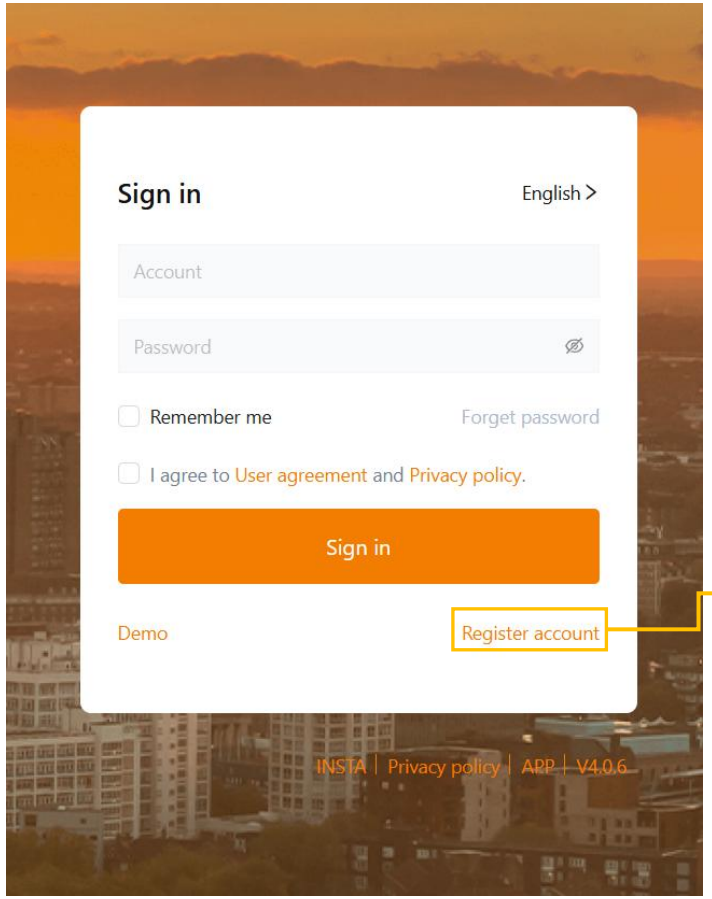
④ Search for notifications, as well as batch mark them as "All read" or batch delete notifications.

⑤ Notification list.

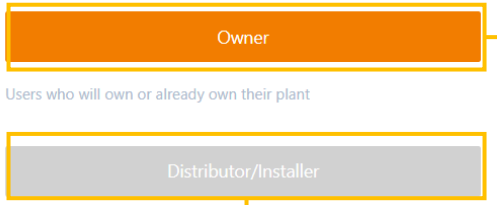
2 InstaGen Cloud Main Functions

Create an Owner Account

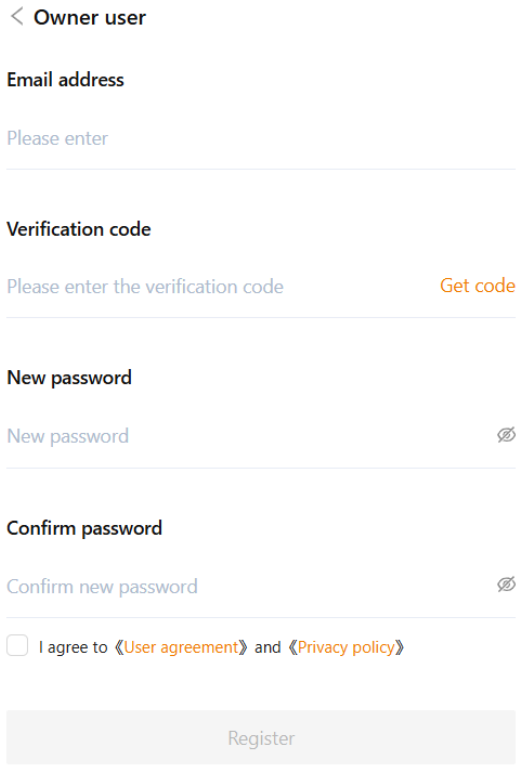
Method 1: Created by owners' self



Owner users can register for an owner account on the sign-in page using their email address.



Distributors and installers need to use organizational accounts, which cannot be created here.

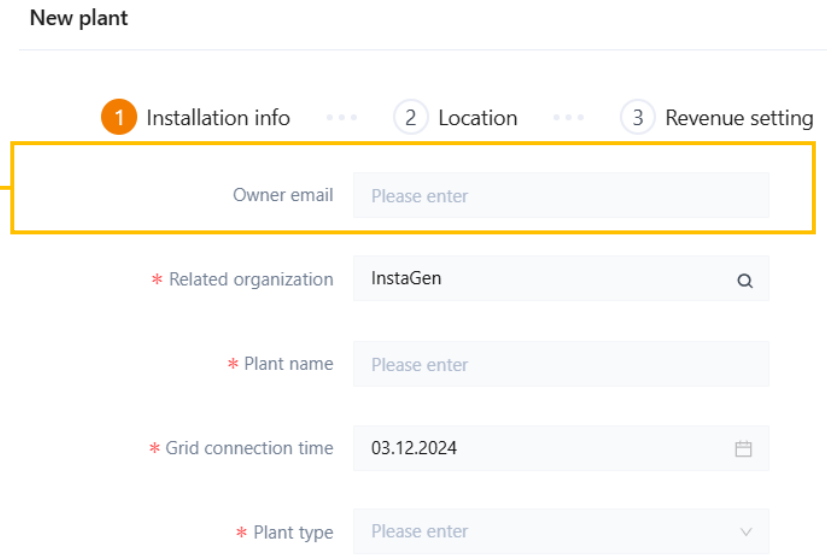


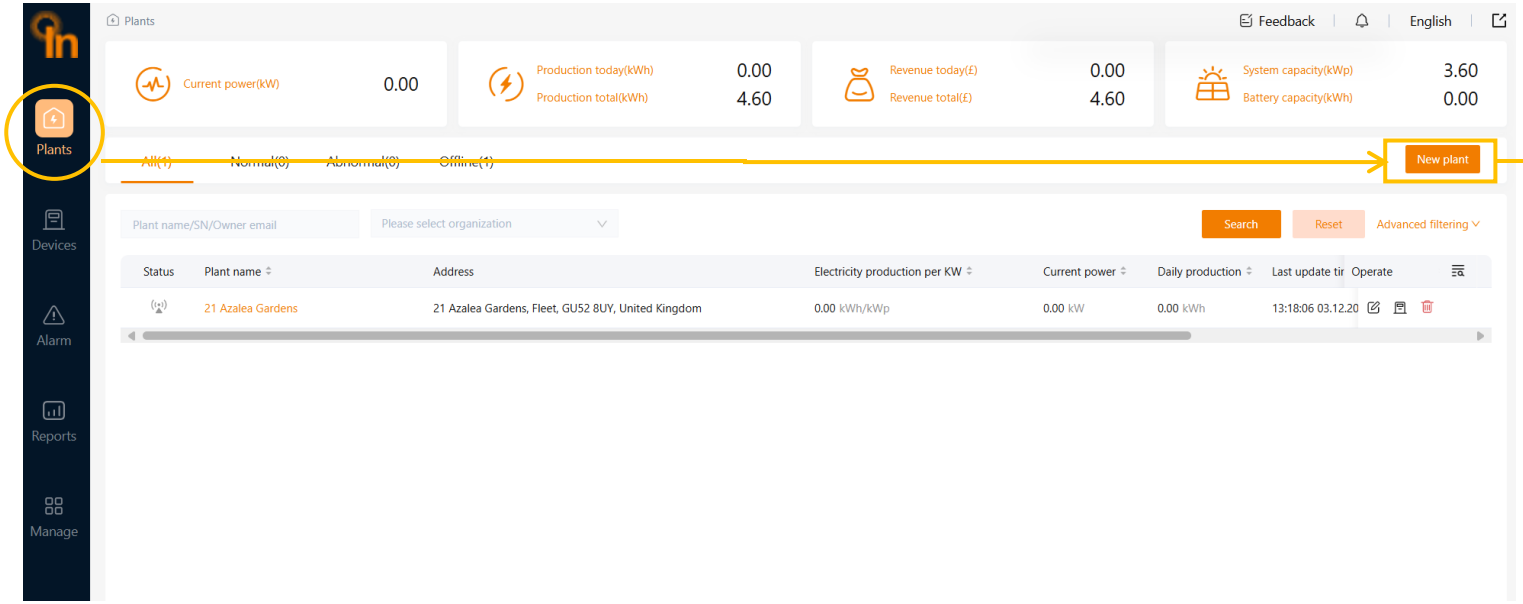
Create an Owner Account

Method 2

Distributors or installers can create owner accounts for end users.

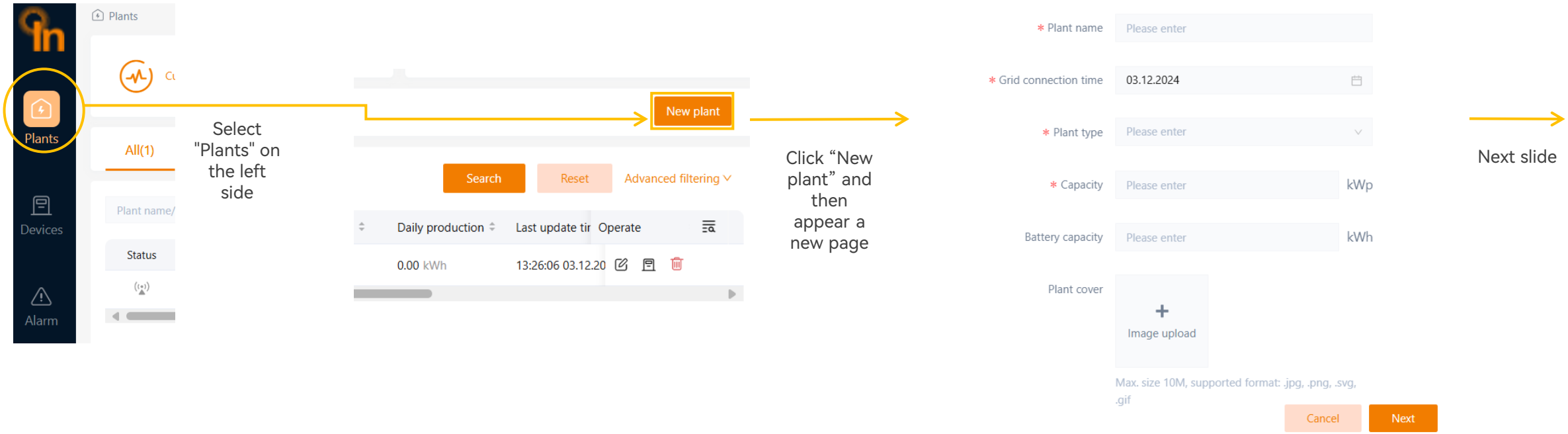
When a distributor or installer creates a power plant for an end user, they can directly enter the end user's email address. Once the power station is created, the initial password will be sent to the end user's email. The end user can sign into the InstaGen Cloud by the email address and initial password, without registering.





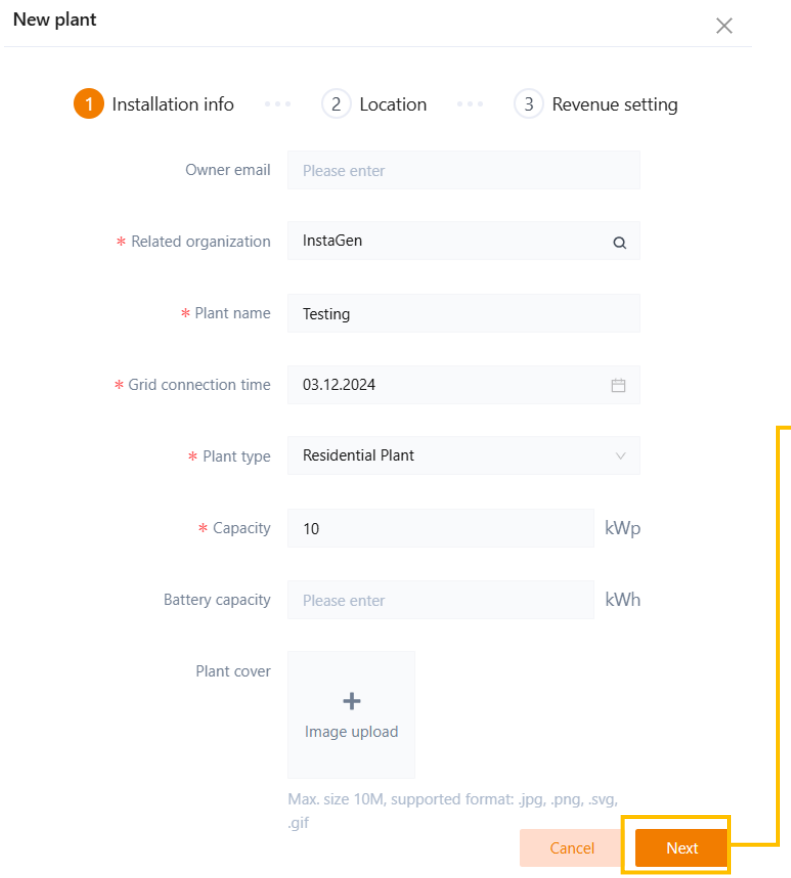
On the Plant Page, click “New plant” to create a new plant.

Create a New Plant

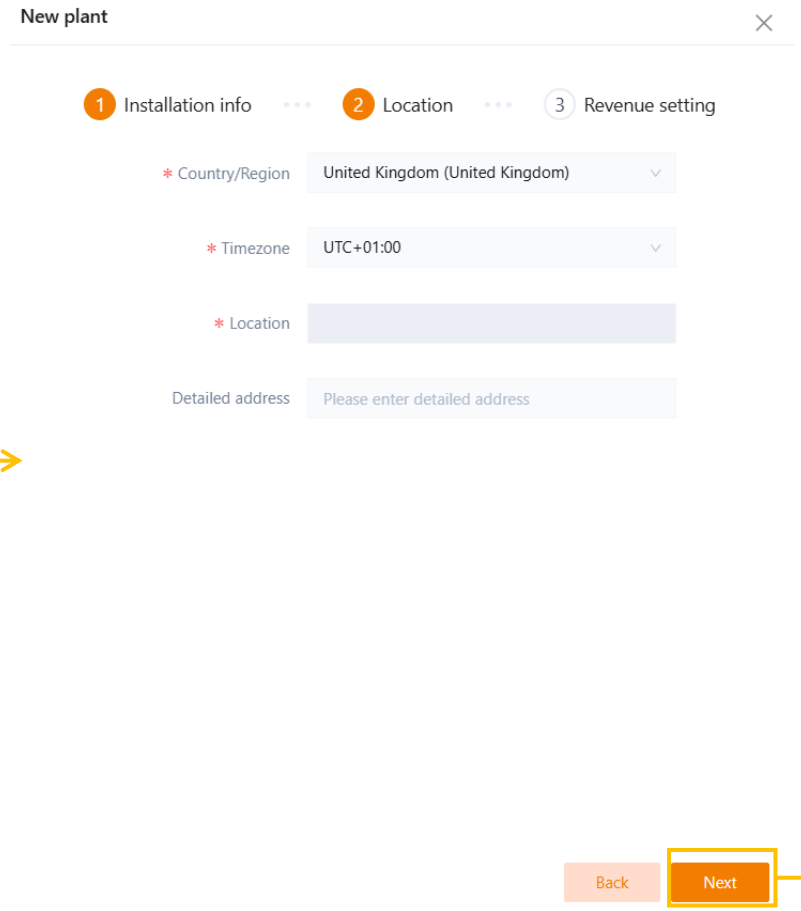


Create a New Plant

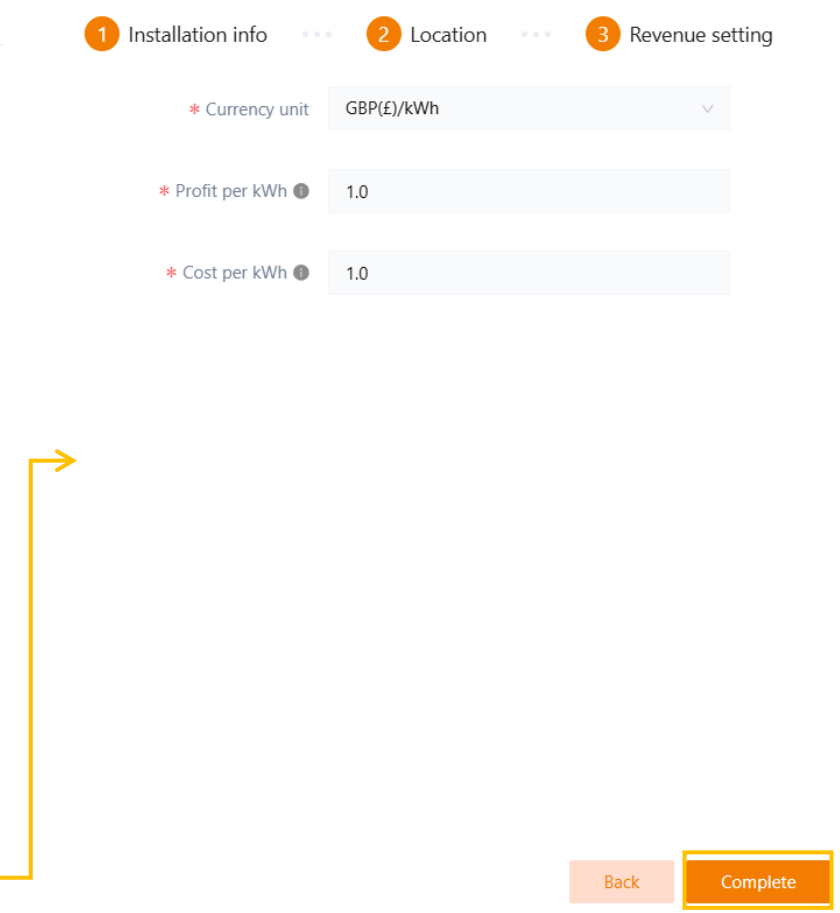
Fill in the required information such as the affiliated organization, grid connection time, plant type, and plant capacity, then click "Next".



Manually enter the address or authorize the platform to automatically retrieve it, then fill in the region and time zone, and then proceed to click "Next".

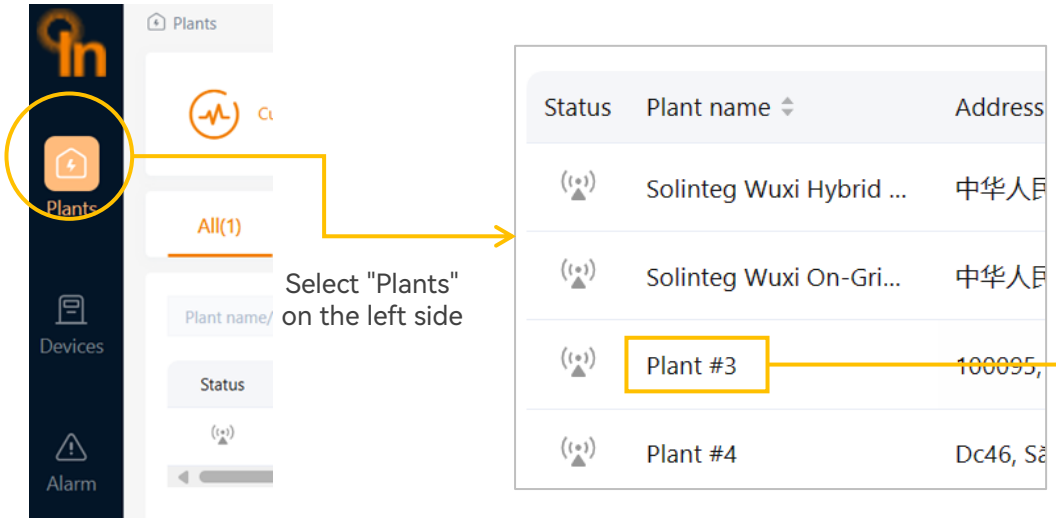


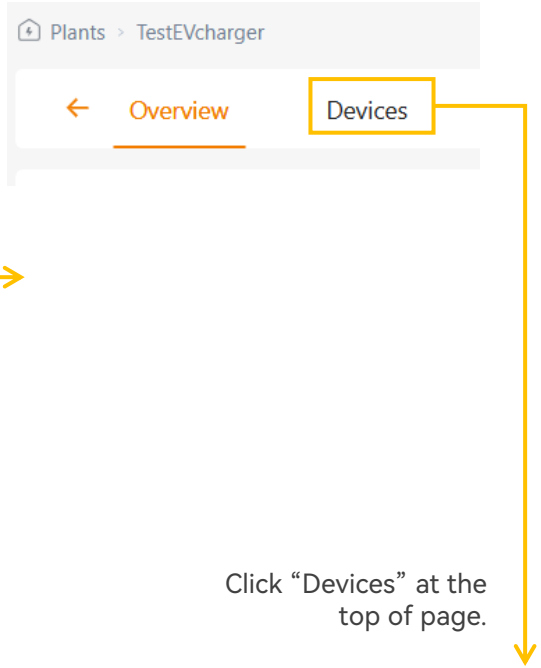
Set the currency unit, selling price for electricity, and buying price for electricity to facilitate the calculation of revenue. Then click "Complete" to finish the creation.

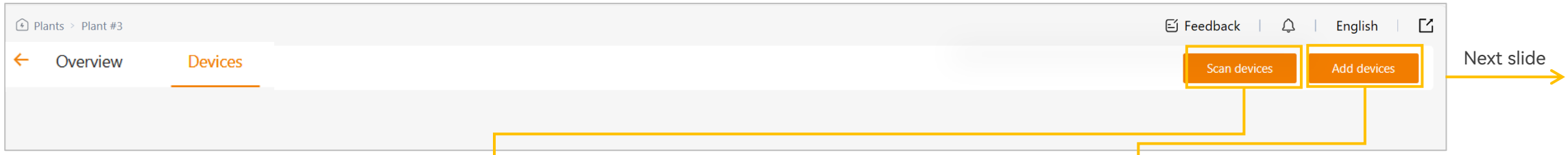


View Plant's Real-time Generation & Consumption

Add Devices to Plant





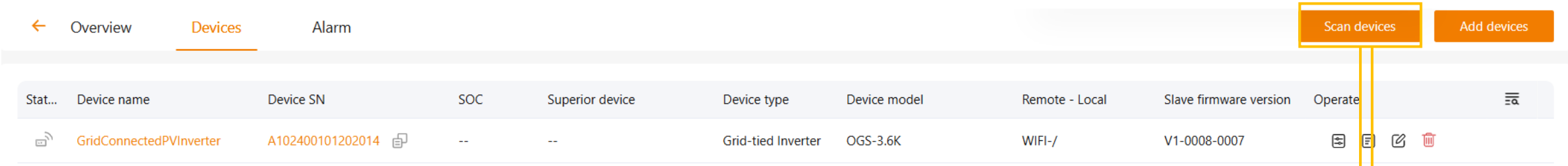


"Scan devices" can automatically add devices that have a physical communication connection with already added devices, such as datalogger, charging piles, and slave inverters after master-slave parallel connection. When you add new devices to an existing system, you can use "Scan devices" to quickly add them.

"Add devices" is often used for the first-time addition of devices or for adding individual devices that do not have a physical communication connection with each other. For master-slave parallel systems, it supports the function of automatically adding slave devices when adding the master device.

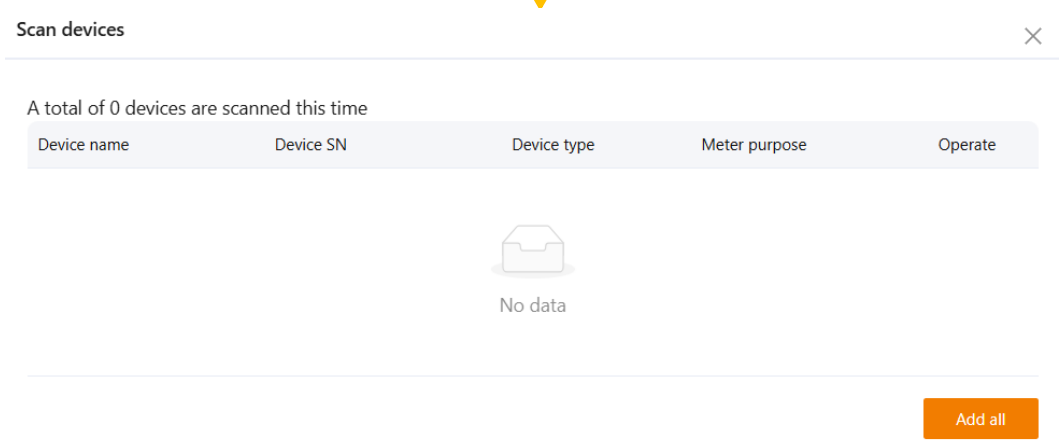
Add Devices to Plant - “Scan devices” Button

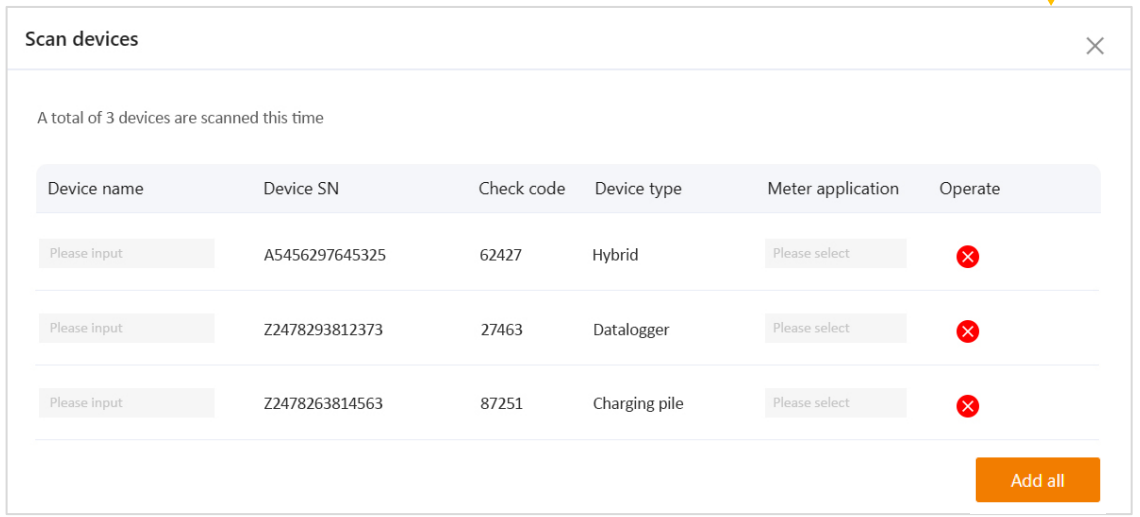
When there are already devices added to the plant and there are new devices physically connected to them, you can use "Scan devices" to quickly add them.



If new devices cannot be scanned, please check whether the physical communication connection is normal.

Devices that have a physical communication connection with existing devices, such as datalogger, charging pile, or slave device in a master-slave parallel system, can all be scanned and quickly added to the plant.

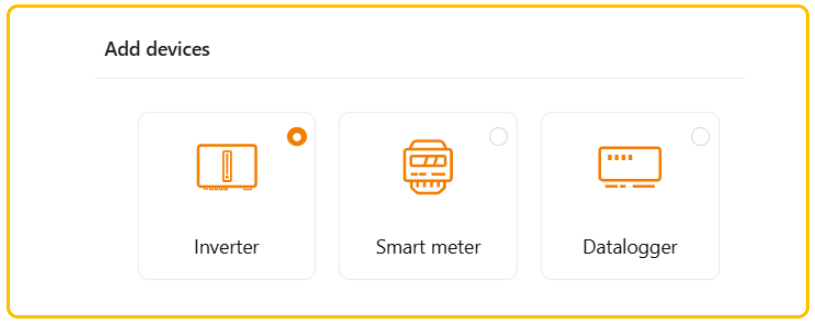




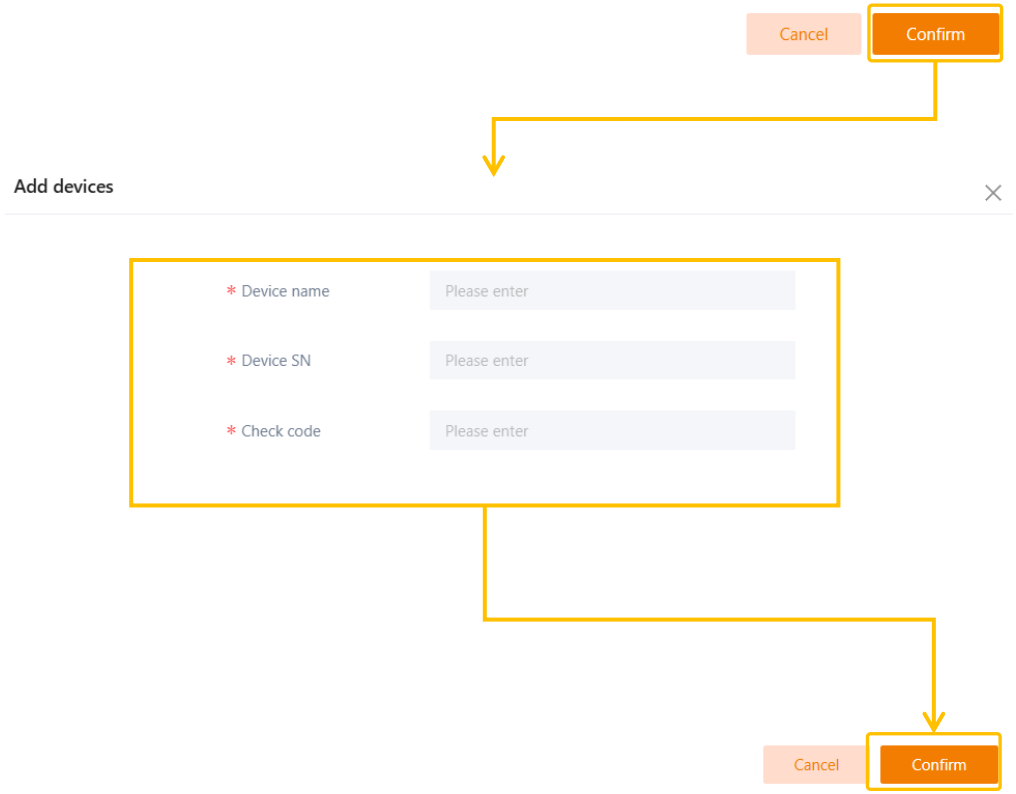
Add Devices to Plant – “Add devices” Button

Add devices

Click "Add devices" will bring up the window shown in the figure on the right.



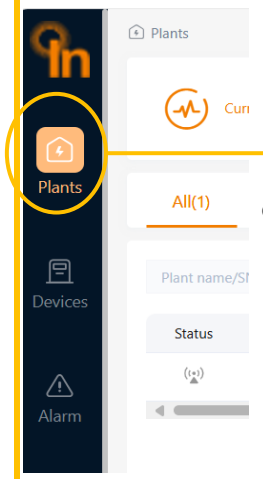
Select the device type you want to add, currently including inverter, EV charger, smart meter and data logger.



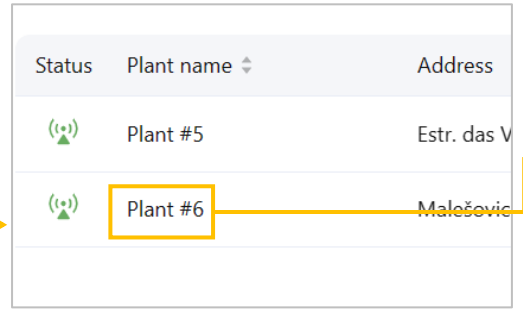
Different device need to input different information, as the left picture shows, the SN code, check code is needed if add a inverter.

View Device Data & Export a Data Report

Method 1



Select "Plants" on the left side

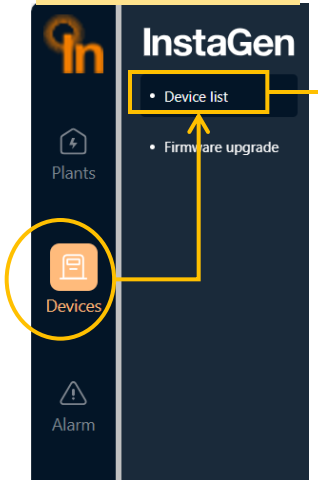


Select the plant which the device belongs to

Click “Devices” at the top of the page.

Device name	Device SN		Superior device	Device type	Device model	Remote - Local	Slave firmware version	Operate
Sacharčuk_Malešovice	5112200100330129	95%	--	Hybrid Inverter	6.0K-25A-3P	WIFI-/	V01.00.00.00-V22.46.02.00	

Method 2



Select the device you want to view, and click the device name or the device's SN code.

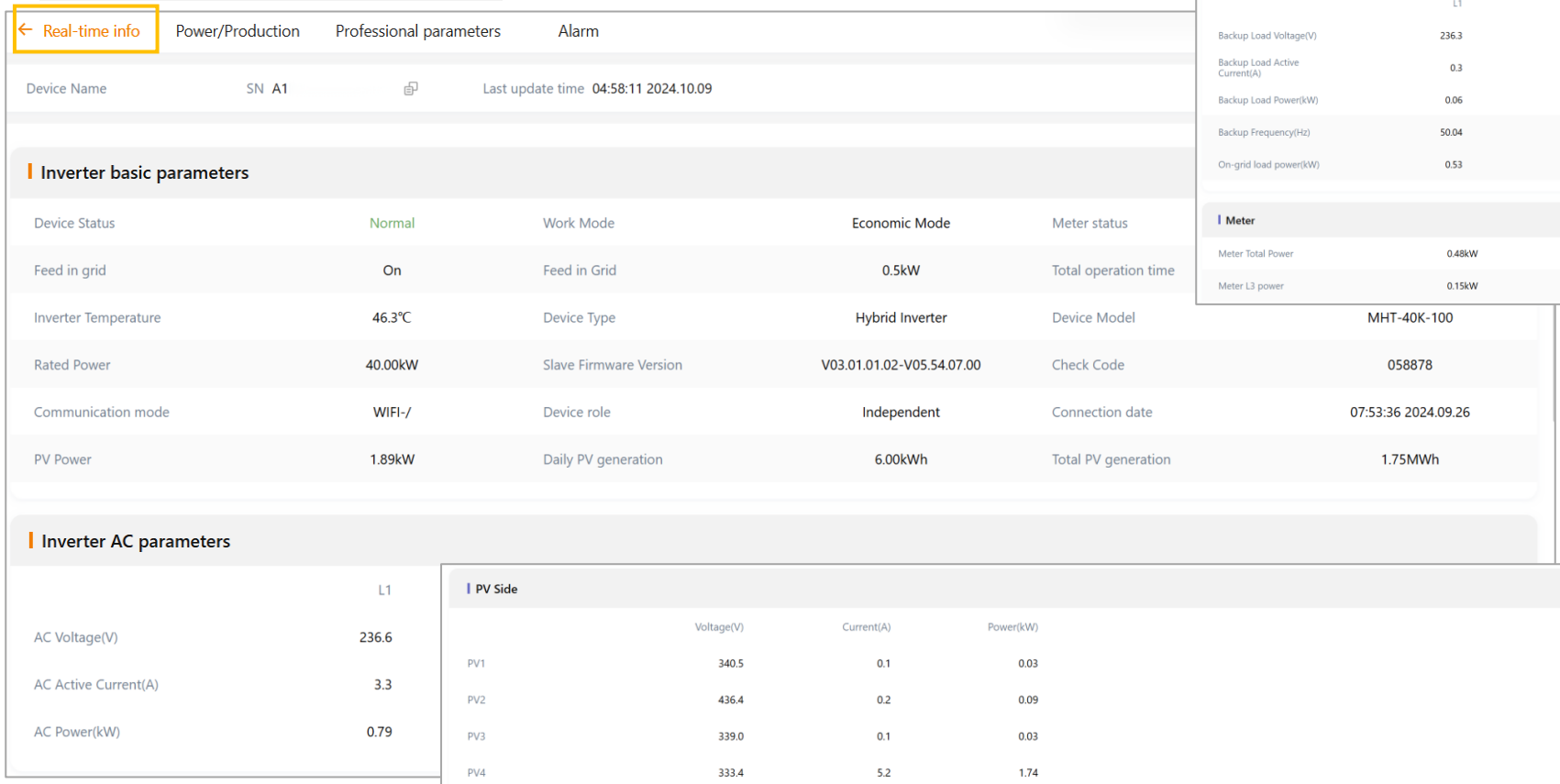
Device Overview Page

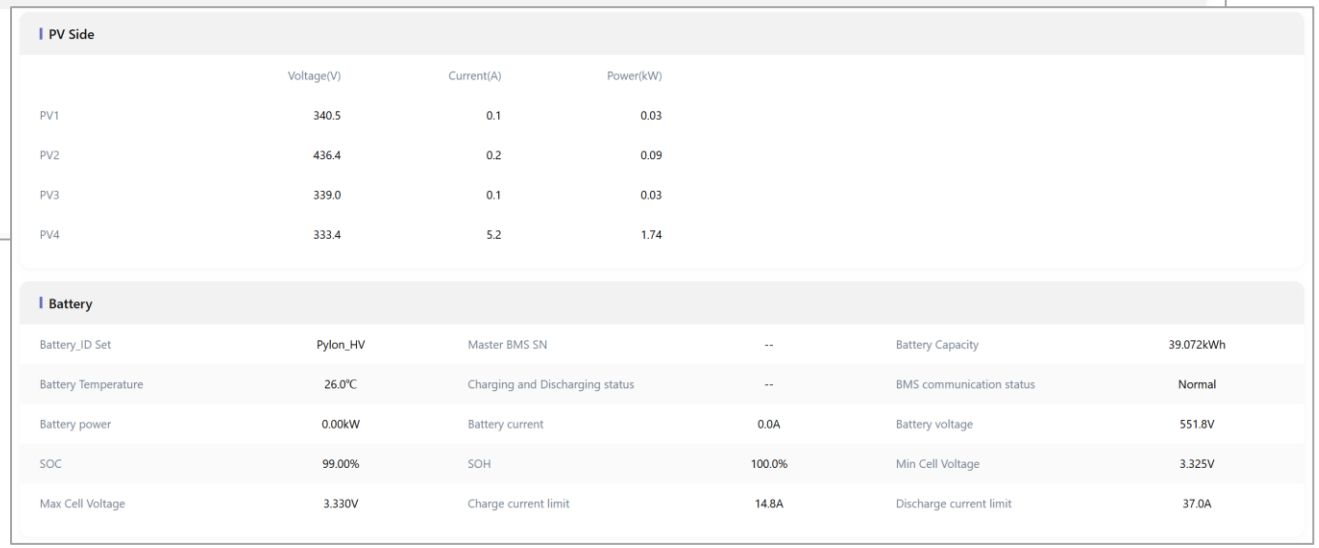
Next slide

A212300102930049	89%	--	#1	Plant #2	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
Z112300200831256		--	Diana Pereira - Samora Correia - PT	Plant #5	Hybrid Inverter	Hybrid-6K	LAN-/	V01.00.00.00-V22.16.02.00	
5112200100330129	68%	--	Sacharčuk_Malešovice	Plant #6	Hybrid Inverter	6.0K-25A-3P	WIFI-/	V01.00.00.00-V22.46.02.00	

View Device Data & Export a Data Report

Real-time info Page





Real-time information about the parameters of inverter, PV side, inverter, meter, battery and load.

View Device Data & Export a Data Report

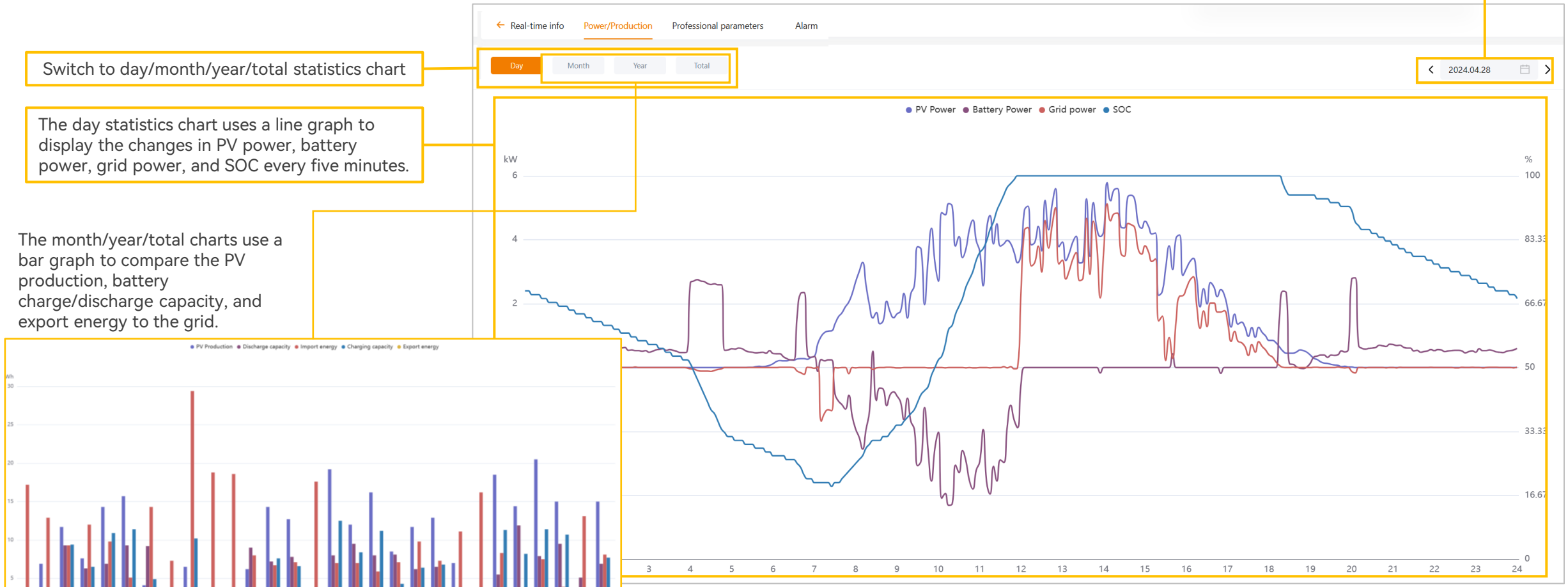
Power/Production Page

Freely select the desired time to view

Switch to day/month/year/total statistics chart

The day statistics chart uses a line graph to display the changes in PV power, battery power, grid power, and SOC every five minutes.

The month/year/total charts use a bar graph to compare the PV production, battery charge/discharge capacity, and export energy to the grid.



View Device Data & Export a Data Report

Professional params Page

Select the date you want to check.

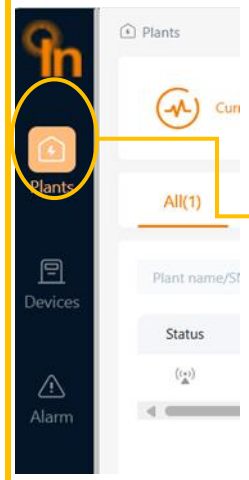
Export a data report

Select the parameters you want to view, multiple selections are allowed, but the units of the selected parameters must not exceed two. After clicking “confirm”, a data line chart will be generated.

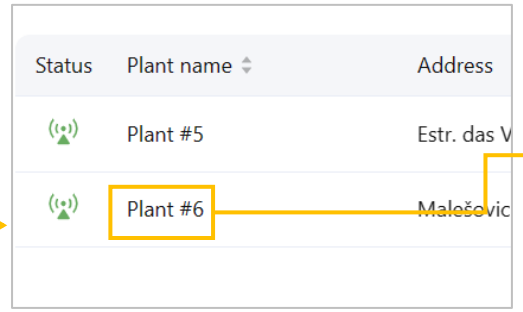
Line Chart

Configure the Device

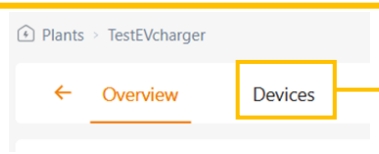
Method 1



Select "Plants" on the left side



Select the plant which the device belongs to



Click “Devices” at the top of the page.

Device name	Device SN	Superior device	Device type	Device model	Remote - Local	Slave firmware version	Operate
Sacharčuk_Malešovice	5112200100330129 95%	--	Hybrid Inverter	6.0K-25A-3P	WIFI-/	V01.00.00.00-V22.46.02.00	

Method 2

In the row of the device you want to configure, find the “Operate” column, and click the button shown to enter “Parameter settings”page.

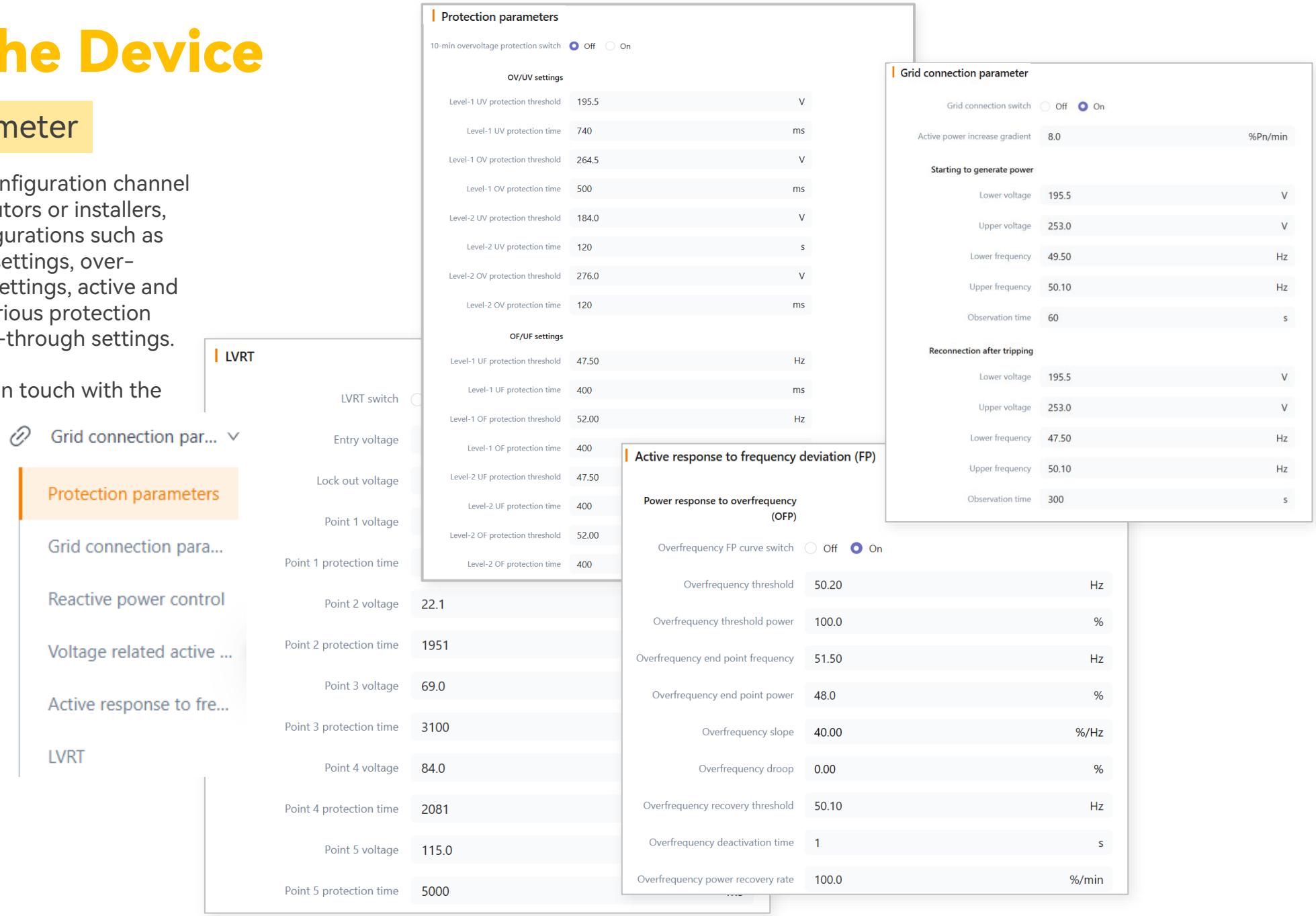
Sta...	Device SN	Superior device	Device name	Plant name	Device type	Device model	Remote - Local	Slave firmware version	Operate
	A21230015823004C 89%	--	#1	Plant #4	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
	A21230012053004A 89%	--	#2	Plant #4	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
	A212300175430040 89%	--	#1	Plant #3	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
	A21230011673004A 89%	--	#2	Plant #1	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
	A212300102930049 89%	--	#1	Plant #2	Hybrid Inverter	MHT-10K-25	WIFI-/	V01.00.00.00-V17.45.02.00	
	Z112300200831256	--	Diana Pereira - Samora Correia - PT	Plant #5	Hybrid Inverter	Hybrid-6K	LAN-/	V01.00.00.00-V22.16.02.00	
	5112200100330129 68%	--	Sacharčuk_Malešovice	Plant #6	Hybrid Inverter	6.0K-25A-3P	WIFI-/	V01.00.00.00-V22.46.02.00	

Configure the Device

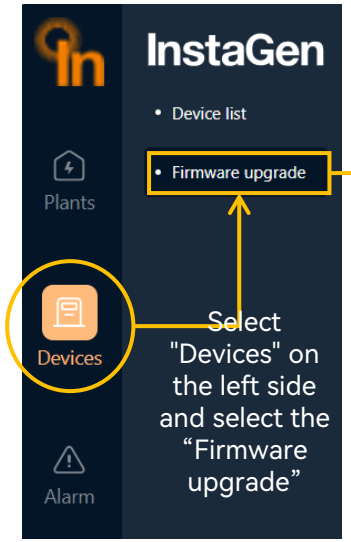
Grid connection parameter

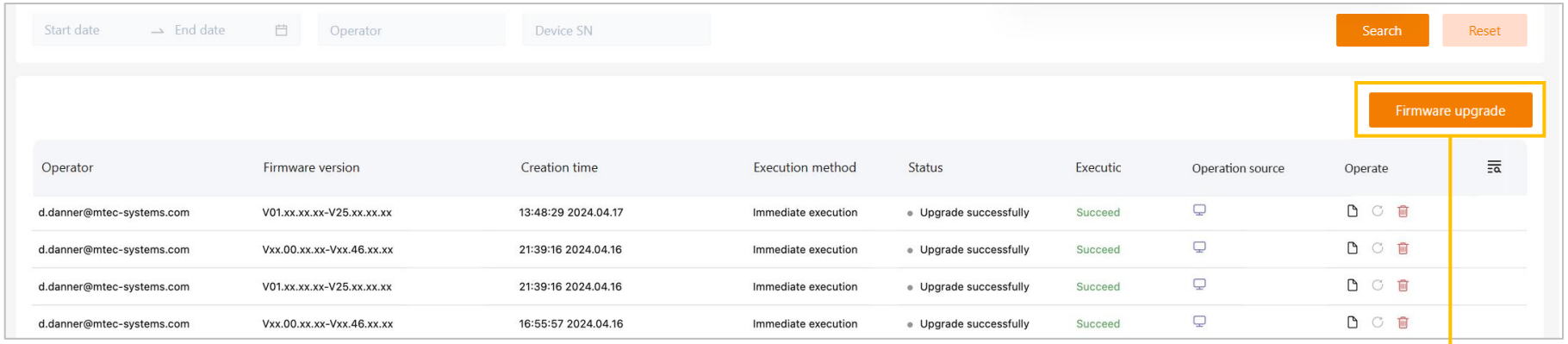
Grid connection parameter is a configuration channel open to highly specialized distributors or installers, which includes professional configurations such as over-voltage and under-voltage settings, over-frequency and under-frequency settings, active and reactive power output control, various protection parameters, and low-voltage ride-through settings.

For more information, please get in touch with the after-sales technical team

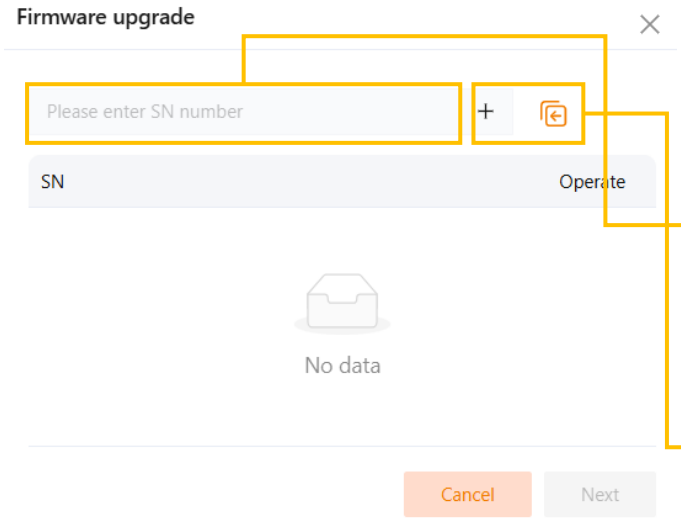


Remote Upgrade Firmware





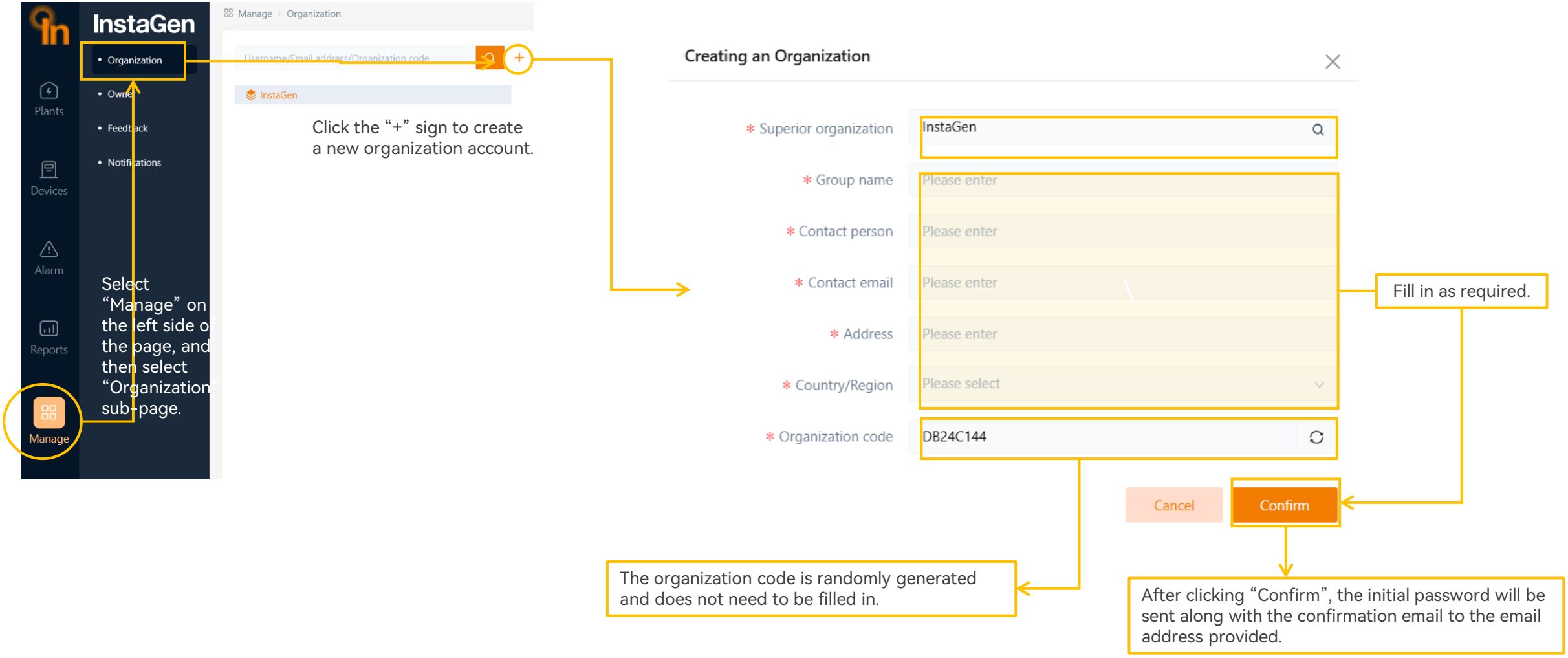
Click “Firmware upgrade” and then pop up a new window.



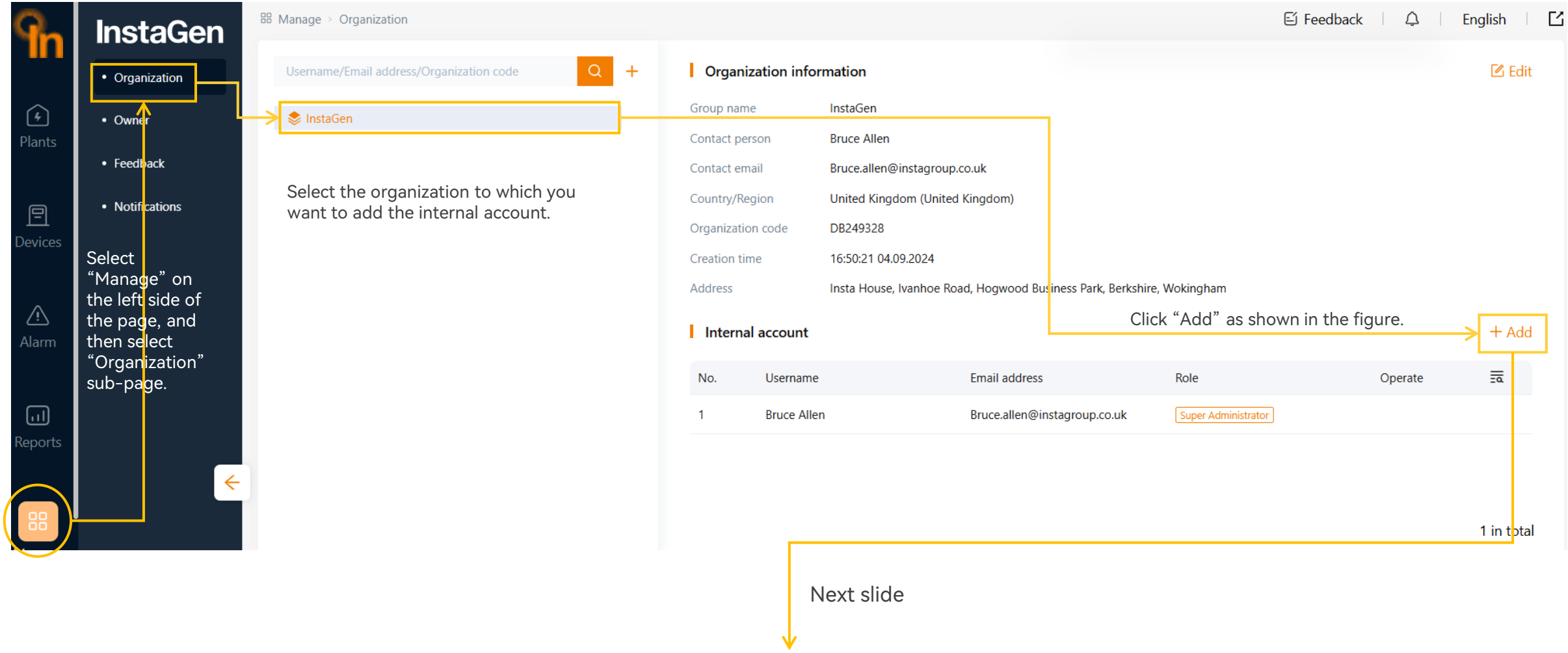
Method 1: Support manual entry of the SN code. After entering, click the “+” to add.

Method 2: Support batch addition of SN codes by importing an Excel file. The left side is the import button, and the right side is the template for the Excel file.

Create Subordinate Organzation Account



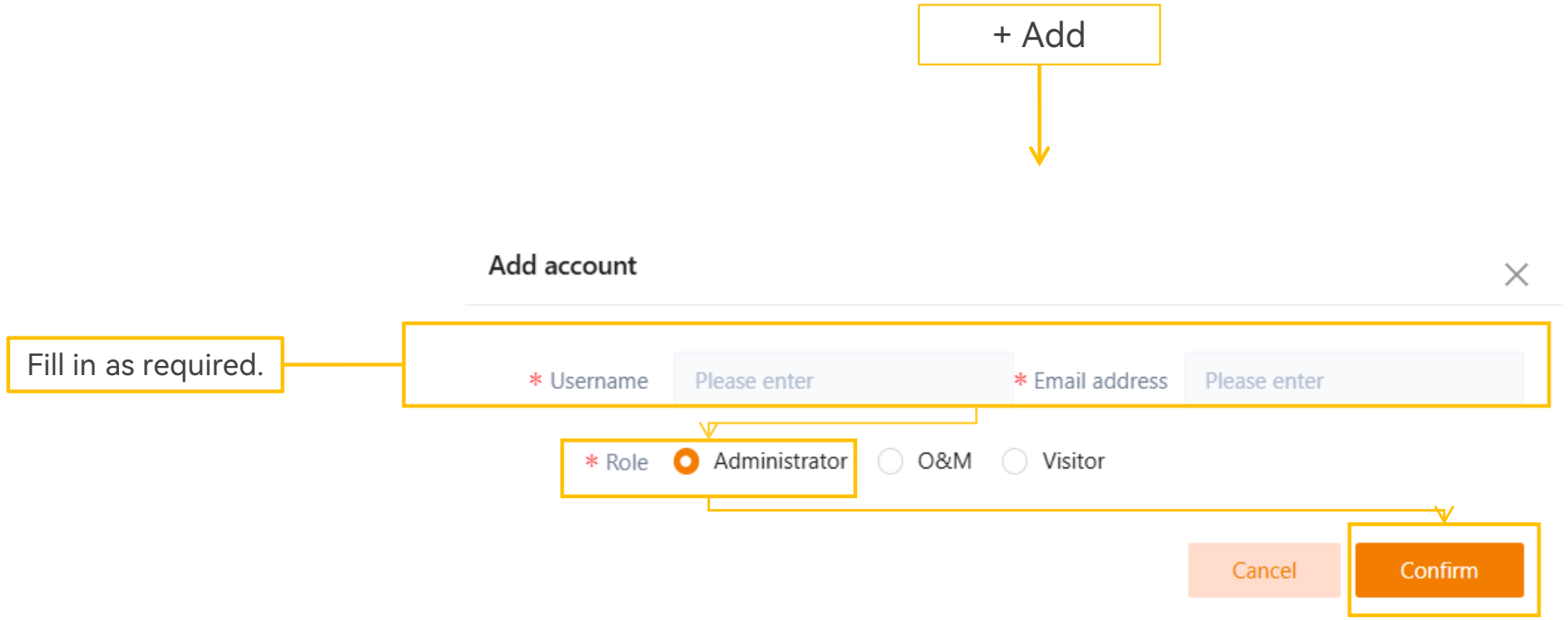
Create Internal Account & Limit the Scope of Jurisdiction



Create Internal Account & Limit the Scope of Jurisdiction

Administrator Role

The administrator role account has the authority to create and manage all internal accounts, access and modify all power plants and devices.



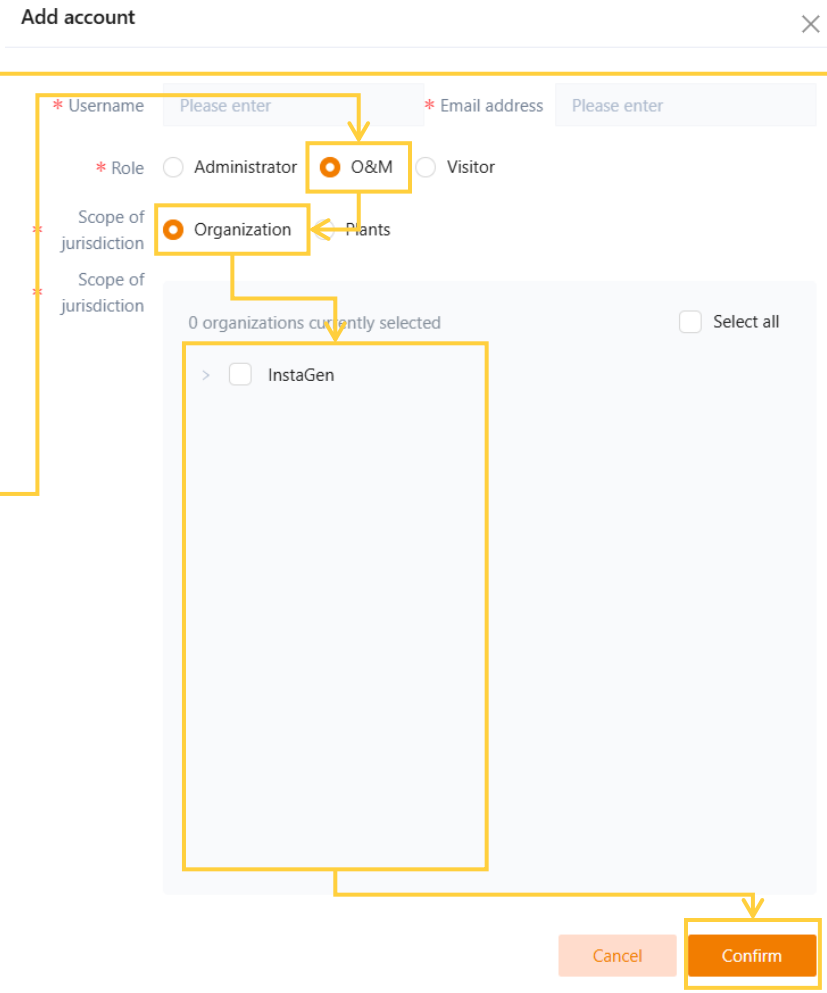
Create Internal Account & Limit the Scope of Jurisdiction

O&M Role

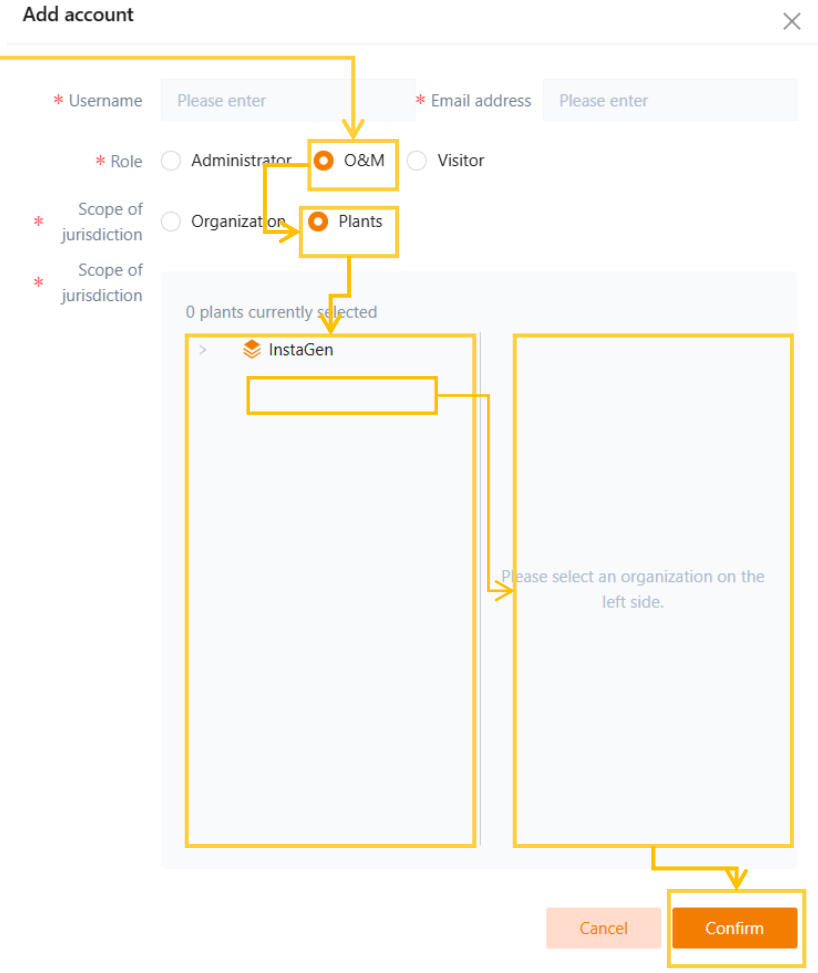
When creating an O&M role account, you can assign a management scope to it based on the organization or plat, allowing the O&M account to view and manage plants and devices within its management scope.

+ Add

Method 1: Divide internal account permissions based on organization unit.



Method 2: Divide internal account permissions based on plant unit.

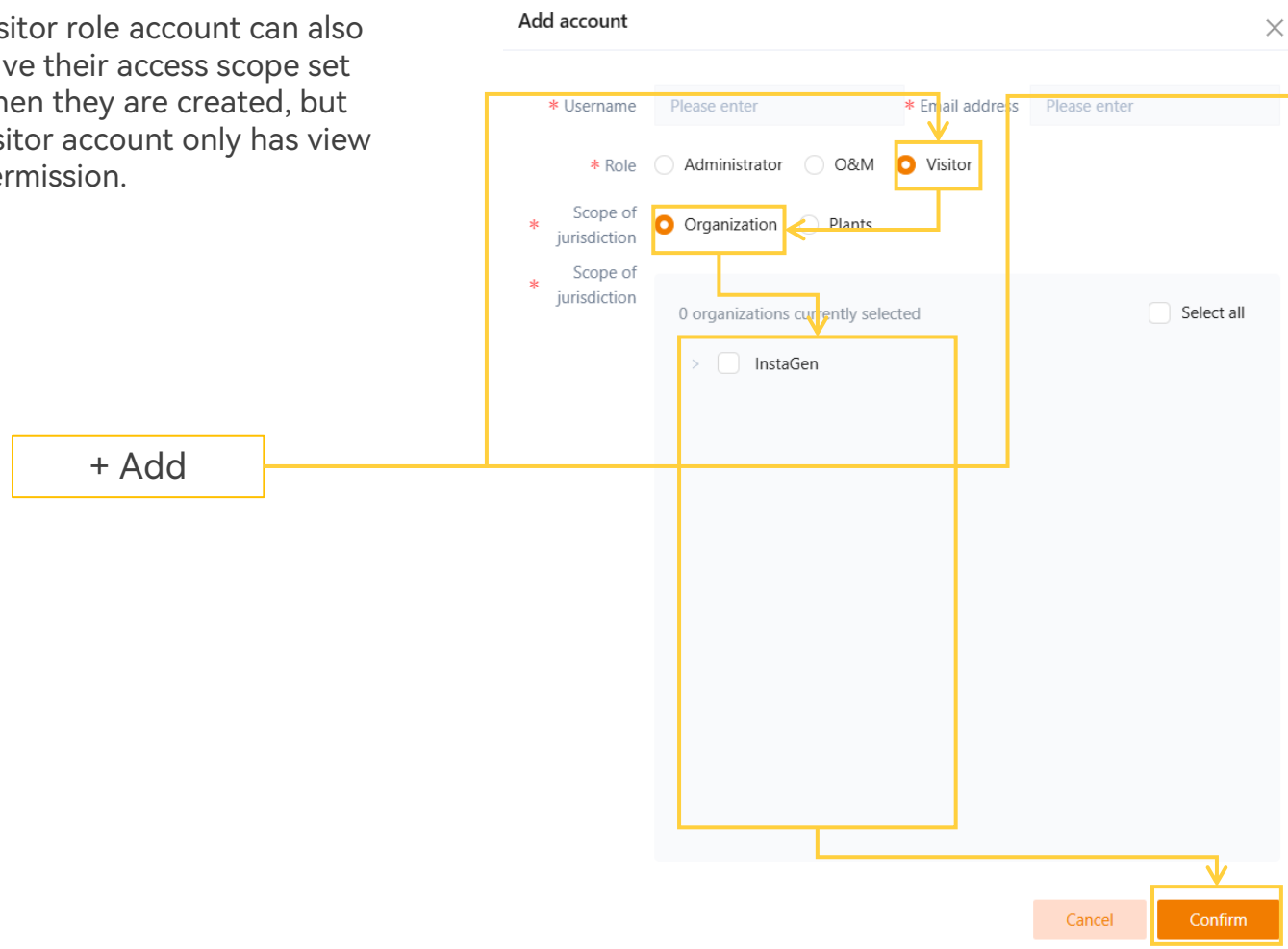


Create Internal Account & Limit the Scope of Jurisdiction

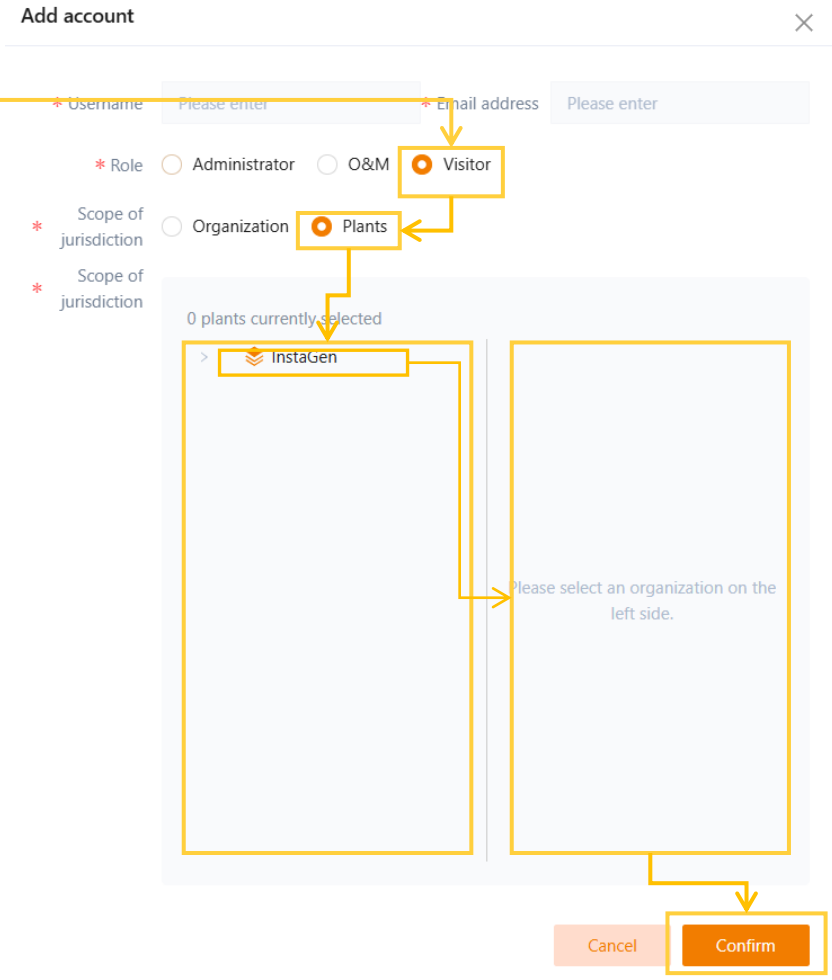
Visitor Role

Visitor role account can also have their access scope set when they are created, but visitor account only has view permission.

Method 1: Divide internal account permissions based on organization unit.

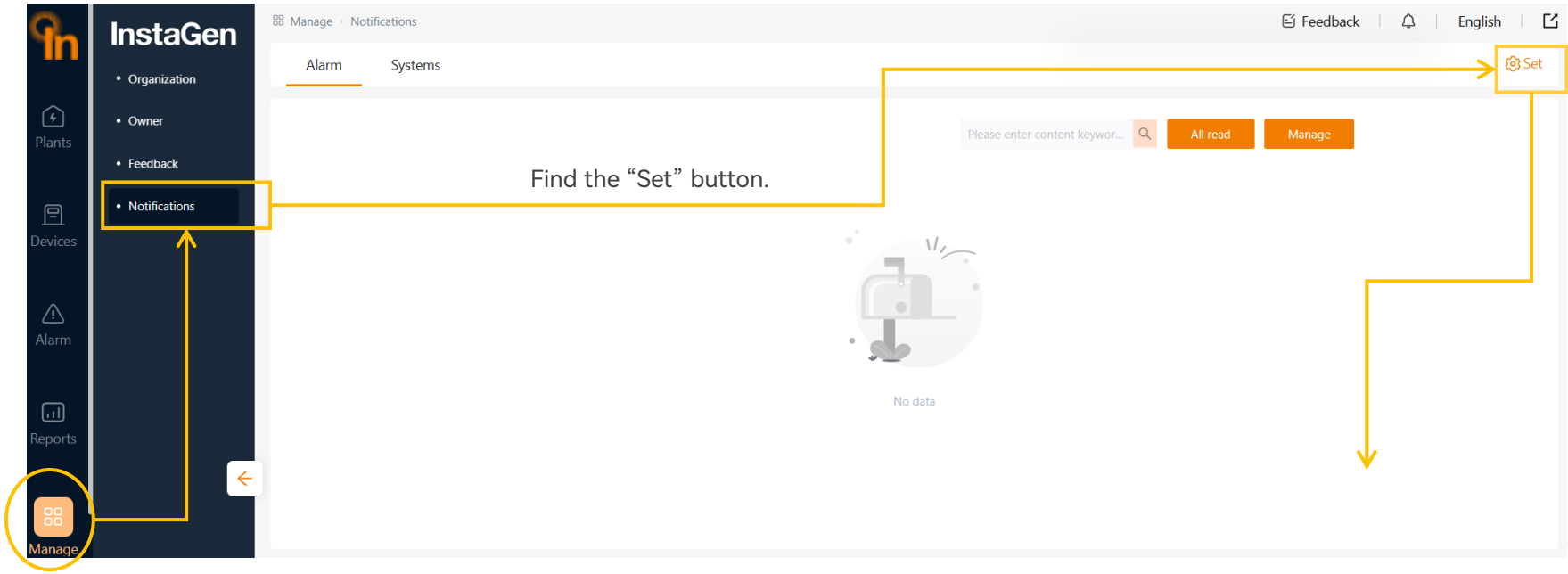


Method 2: Divide internal account permissions based on plant unit.

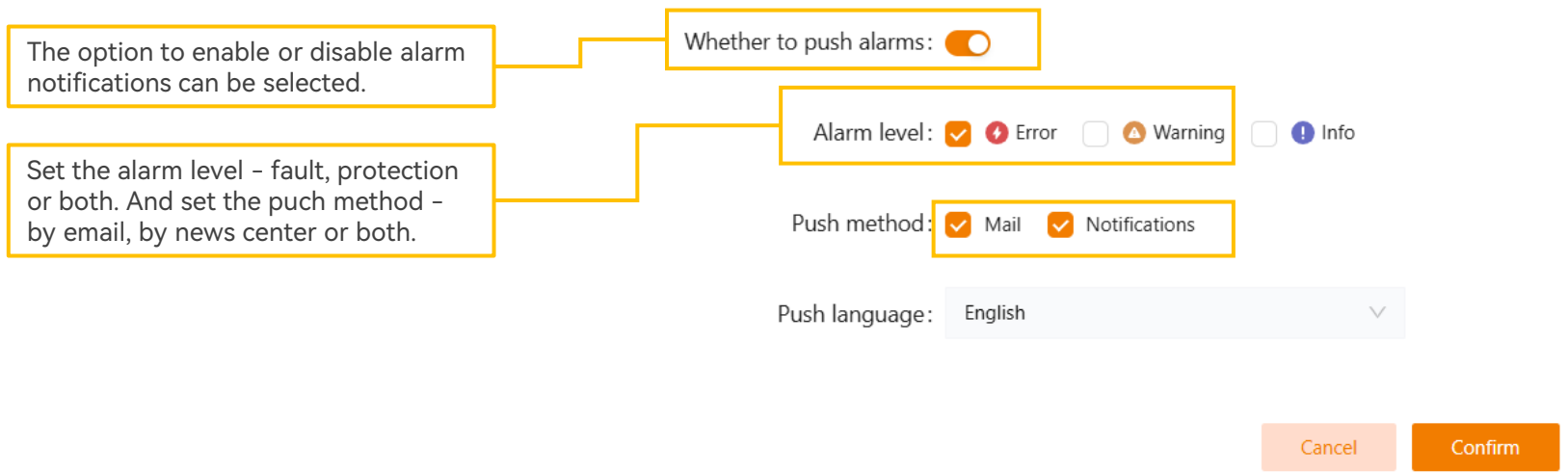


*The page may change with updates, please refer to the actual website for the latest version.

Set the Push Method of Alarms



Click “Set”, then a new window will pop up.



THANK YOU