



# Instagen Cloud Monitoring Platform USER MANUAL

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# 1. Introduction

The Instagen Cloud (Instagen Monitoring Platform) is a smart energy storage operation monitoring and management system developed by Instagen specifically for distributors, installers, and end-users of distributed PV power plants.

At present, the system has Installer version and End-user version, with the corresponding webpage and mobile application available.

This platform provides an easy-to-use procedure for accounts under monitoring. It enables installers to configure the monitored accounts quickly and provides them with power generation data of both plant and device, as well as detailed alarm information about the power plant regarding commissioning and diagnostics. This manual is intended to guide users in operating and managing Instagen Cloud.

#### **1.1 System Composition**

Install the DTU, inverter, smart meter, and battery before using the monitoring system. DTU is a communication gateway which is used to collect status and operation data from inverter and transmit control commands to it. At the same time, the DTU also connects to the Internet through a router and sends inverter data to the Instagen Monitoring Server to achieve remote control of the whole system.

## 1.2 Installer & End-user App/Platform

#### 1.2.1 App Download

Instagen Installer is a mobile application developed by Instagen, especially for installers of distributed plants. It is committed to better performing installation and maintenance.

Instagen End-user is a mobile application developed by Instagen, especially for owners of distributed plants. It can absorb the operating data of plants from Instagen Cloud.

a. Scan the QR code to download.



Instagen Installer

Instagen End-user

b. Search "Instagen Installer" or "Instagen End-user" in the Google Play or App Store.

#### 1.2.2 Platform

Open the browser, and then enter <u>https://cloudinstagen.co.uk/platform</u> in the address bar to enter the login interface. Please use the latest version of Google Chrome at a resolution of 1366×768 or above.

# 2. App Settings and Data Query

#### 2.1 Configure the Network of DTU

a. Choose the wireless network of DTU with a serial number like "DTS-22480680" and enter the default password "**ESS12345**" to connect DTU.

Settings	Wi-Fi	Edit	Ente	er the password for "DTS-224	80680"
Wi-Fi			Cancel	Enter Password	3
New Wi-Fi network from Control Center	connections have been	turned off	Passwor	d	
MY NETWORKS			You can als	so access this Wi-Fi network b	y bringing
-		i	connected contacts.	to this network and has you in	their
-		i			
JTHER NETWORKS					
		( <u>i</u> )			
		i			
-		i			
Summer a	1	i			
DTS-224806	80	ê <del>?</del> (j)			
	-	i			
-		i			
Other					

b. Open the Instagen Installer App and choose the " $O\&M \rightarrow Network$  Config". Enter the account and password of a nearby stable wireless network, tap the button of "Send to DTU", and wait until the "Connection Succeeded" appears to tap "Finish".

ο	&M	< Network Config		< Network Config
	Normal: 1	DTU AP Password Setting	>	DTU AP Password Setting
3 Total	<ul> <li>Offline: 0</li> <li>Alarm: 0</li> <li>Unfinished: 2</li> </ul>			
Energy This Month 600 Wh	Lifetime Energy 5.4 kWh	Wi-Fi		DTU Router Server
Total Reduction 5.38 Kg	Carbon Emission Offset 0 Trees	Please select a WiFi network and enter the pass	word.	Networking Status: Connection Succeeded Networking Mode: Wi-Fi Network Quality: 100% Are you connected to the server: Connection Succeeded Time to connect to the server: 2024-03-06 13:28:34
Tools		Wi-Fi Enter login account	5	
Alarm	Toolkit	Send to DTU 6		
Retwork Config	4			Reconfigure
	× e			

#### 2.2 Change the Default Password

a. Choose the wireless network of DTU with a serial number like "DTS-22480680" and enter the default password "**ESS12345**" to connect DTU.

attings	WI-FI	Edit	Ente	r the password for "DTS-22480680"
Wi-Fi			Cancel	Enter Password 3
ew Wi-Fi network co om Control Center.	onnections have been	turned off	Password	1
Y NETWORKS			You can also your iPhone	o access this Wi-Fi network by bringir a near any iPhone, iPad, or Mac which
-		i	connected t contacts.	to this network and has you in their
-		i		
THER NETWORKS				
		i		
		i		
-		i		
	1	i		
DTS-2248068	0	ê ≑ (ì)		
		i		
-		i		

b. Open the App and choose the "O&M  $\rightarrow$  Network Config  $\rightarrow$  DTU AP Password Setting". Enter the original password and new password, tap the button "Send to DTU", and wait until "Setting succeed" appears to reconnect the DTU.

O&M	<	Network Config		< DTU AP Pa	ssword Setting		C DTU AP Password S	Setting
Normal: 1	DTU AP Password	I Setting	>	DTU AP Password Setting	6		DTU AP Password Setting	
3 Total	5			Original Password	Enter	Ø	* Original Password	۲
• Unfinished: 2				New Password	Enter	8	* New Password	•
				Confirm Password	Enter	8	* Confirm Password	•
Image: Second systemEnergy This MonthLifetime Energy600 Wh5.4 kWh		WI-FI		Password must be between letters, numbers, or special	8 and 16 characters, characters.	consisting of	Password must be between 8 and 16 c of letters numbers or special charact	characters, consisting
Total Reduction     Carbon Emission Offset       5.38 Kg     Trees	Please select a W	ViFi network and enter the passwo	rd.	Ser	d to DTU			(x)
Tools	Wi-Fi	Enter login account	]~	1	(7)		Setting succeed. Please red AP hotspot.	connect the
	Password	Enter password	8					
Alarm Toolkit								
ت Network Config								
E × 2								

#### Note:

The Wi-Fi name and password do not support special characters such as spaces.

#### 2.3 Reset the Password of DTU

When the DTU is powered on, long press the "SET" button on the left of the DTU for 5 seconds (DTU indicators will be off during the long press), and then the DTU password will be restored to default password "**ESS12345**".



### 2.4 Reconfigure the Network of DTU

a. Choose the wireless network of DTU with a serial number like "DTS-22480680" and enter the password to connect DTU.

Settings Wi-Fi	Edit	Enter the password for "DTS-22480680"
Wi-Fi		Cancel Enter Password 3
New Wi-Fi network connections hav from Control Center.	e been turned off	Password
MY NETWORKS		You can also access this Wi-Fi network by bringing
10.000	i	connected to this network and has you in their contacts.
100.0000	i	
OTHER NETWORKS		
and the second sec	i	
10000000 (20)	i	
1111111	i	
1	i	
DTS-22480680	ê 후 🚺	
	i	
10.000	i	
Other		

b. Open the App, choose " $O&M \rightarrow$  Network Config", tap "Reconfigure", and then choose a new wireless network. Enter the account and password, tap the button of "Send to DTU", and wait until "Connection Succeeded" appears to tap "Finish".



#### 2.5 App Local Data Query

Tap "Toolkit  $\rightarrow$  Inverter Management" and choose "Inverter SN". You can check the real-time data of PV, battery, grid, load, generator, and PV inverter here.

O8	kΜ	< Overview	<	Inverter Self-check	< Real-time Da	ata
3 Total	<ul> <li>Normal: 1</li> <li>Offline: 0</li> <li>Alarm: 0</li> <li>Unfinished: 2</li> </ul>	Cloud Communication DTU-SN: 430122480680 Last DTU Connection to the platform: WIFI Last Connection Status: 🛜	Inverter SN 200422400260	Battery Setting Li-ion Battery	Update Time: 2024-03-06 13:30:58 PV 1 Voltage Current Power	0.3V 0A 0W
Energy This Month 600 Wh	All Lifetime Energy 5.4 kWh	Last Connection Time: 2024-03-06 13:29:25	_		Daily Energy	0kWh
Total Paduction	Carbon Emission Offset	Inverter Management			Voltage	0.5V
5.38 Kg	0 Trees	Inverter Status: On-grid Mode			Current	0A
		Battery Work Status: Standby			Power	ow
Tools		Update Time: 2024-03-06 13:30:23			Daily Energy	0kWh
*	*	Settings			Battery	
-	Toolkit	Self-check >			Battery Type	1
Alarm		Grid Profile Config			Battery Work Status	0
	1	Meter Location >			Fault Code	0
Network Config		Generator Setting			Battery SOC Battery SOH	28% 100%
	. 0	Network Config >			Battery Voltage	52.6V
	Ň	Networking			Device	Control

# 3. About Monitoring Account

#### 3.1 Get an Instagen Distributor/Installer Account

(1) If you are a new distributor, send an email to <u>service@instagen.com</u>. The Instagen Technical Service Center will apply for an account for you.

(2) If you are a new installer with Instagen and don't have an installer account, approach your distributor to create an account for you.

(3) If you are an installer/distributor and have an installer/distributor account, you can directly create subaccounts and plants under your existing account.

# 3.2 Log in to the Insta Cloud

Go to <u>https://cloudinstagen.co.uk/platform</u> and log in to the Instagen Cloud (Instagen Monitoring Platform) with your account.

Login          A Enter account         A Enter password         Enter password         Remember Me         Forgot Password 2         Login		Inst	aGen		
A Enter account     Enter password		μ	ogin		
Enter password	e	Enter account			
Remember Me Forgot Password ? Login	Ð	Enter password		ø	
Login	F	emember Me	Forg	ot Password ?	
		Lo	ogin		

#### Note:

(1) The end-user only has the authority to check the plant data and perform smart control settings.

(2) Dealers can create distributor and installer organizations, while installers can create installer organizations and organization users.

(3) Regular users have two user-defined roles: sub-installer and normal installer. Sub-installers can only create and edit plants and issue networking command.

(4) An organization can have numerous login accounts, so just select the organization name and add organization users.

(5) Email can also be used as a login account.

#### 3.3 Change Email and Password

- a. Enter your account and password and log in to the Instagen monitoring platform.
- b. Select the person icon on the top right corner and click the "Account Settings" button.



c. Click the "Modify" button on the right of personal information, enter new Email, and then click "Confirm".

Instag	en	ē		९ 🖶 🙎
		A Account Settings	Account Settings         Login Account         Inter, Instance         Operation         Operation         Operation         Operation         Data Tope         Operation         Market         Data Tope         Operation         Market         Data Tope         Operation Information         Reserved Information         Market         Market Constitution of the account account as all anvious in the platform.	(2) Musty Musty Careet new
F	dit Basi	c Informati	on	V
		e informati		~
	Logi	in Account:		_
		* Name:	Enter	
		* Email :	Enter	3
	Conta	ct Number:	Enter	
				4
			Cancel	Confirm

d. Click the "Modify" button on the right of password, enter the original password and new password, and then click "Confirm".

InstaGen	Ē		۹ 🖶 😣
Ω Hone B Rest X Color ~ Crig & User ~ γ	A Account Settings	Account Settings         Ligh Account         Settings         Organization         Setting         Organization User         Organization User         Orar Type         Orar Type         Orar Type         Orar Type         March Romation         Name: None / Conduct Number; None         Passed         Setter         Account Consolition         After account conductions you cannot use all services in the platform;	Maily (5) Maily Caret new
Edit Basi	c Informati	on	X
Log	in Account:		
* Origina	Password :	Enter	
* New	/ Password :	Enter	6
* Confirm	n Password :	Enter the password again	
			(7)
		Can	cel

e. If you want to cancel your account, click the "Cancel now" button on the right of Account Cancellation, enter the password, and click "Confirm". Note that once you perform this operation, your account data will be deleted permanently, and you can not use all services in this platform.

Instagen		۹	8	
() Hone () Ford () Ford () Otal ()	A Accord Settings  A Accord Sett	)	Modily Modily Cancel now	



#### 3.4 Delete an Account

a. Click "Org. User Management" on the menu bar under "Org & User", choose the organization, and then click the "Delete" button to complete deletion.

Instagen	Ē						۹
	Organization	Organization User					
≝ Plant 迷 O&M ~	Enter org. name. Q		✓ Enter email address	Enter account	Q Search		+ Add Organization Users
🗟 Org & User 🔷 🔨	1 A Test_L B A Test_L	Display users of st	ubordinate organizations				0 🜑
畠 Organization Management		Login Account	Name	Organization	Туре	Creation Time	Action
Org. User Management	(2)	8		Test_L	Installer	2024-03-05	≅ I ∠ I ⊕ (3)
条 Owner Management							

b. Click "Owner Management" on the menu bar under "Org & User", choose the organization, and then click the "Delete" button to complete the deletion.

0. South
izations O C
Organization Creation Time Action
Test_L 2024-03-06 🛛 🖂 🔒 🗊 🄇
Test_L 2024-03-05 🔀   🖉   🙆   🗂

# 4. Web Page Introduction

The menu bar shows the main functions of Instagen Cloud, so the user can select the corresponding pages and perform corresponding operations.

#### 4.1 Home Page

The Home page includes the power generation, plant status, all devices, historical data, number of new plants, number of new devices, and your favorites.

Instagen	Ē	۹ 🕸 😣
<ul> <li>A Home</li> <li>Bant</li> <li>X O&amp;M ~</li> <li>Grg &amp; User ~</li> </ul>	Power Generation         Plant Status         All Devices           Image: The Month 500 m/s         Image: The Month 5.30 m/s         Image: The Month Status         Image: The Month Statu	Helo, - Otu 1 - Otu 1 - More 0 -
	Historical data Production V Month Year Total	My Favorities         F           <         2024-03         Image: Second House
	es contraction of the second s	Number of New Plants
	a1	Number of New Devices

#### 4.2 Plant Page

The Plant page includes the plant list, your favorites, and the plant map.

- InstaGen	Ξ 0 0 8
⊕ Home	Plant List My Favorites Plant Map
📾 Plant	System Type V Plant Status V Plant Name V Enter plant name Q Advanced Filter V
жовм ~	Plant ID Plant Name Status Capacity Organization Power Ratio Creation Time Action @
🖲 Org & User 🛛 🗸	3638020 📷 1112312 🔥 1206W Insta * 2024-03-04 🕅 🖉 🖉 0
	3561970 🚺 Greenwood House 🕫 🥝 1kW Insta = 2024-02-28 🞗 🌶 🖈

#### 4.2.1 Create a Plant

a. Click "Create Plant", fill in the basic information, and then click "Next".

InstaGen Jacomy	Ē	۹ 🚇 🔕
습 Home	Plant List My Favorites Plant Map	
曲 Plant	Plant Status         V         Plant Name         V         Enter plant name         Q         Advanced Filter V	(1) 🕞 Create Plant
жо&м `	Plant ID Plant Name Status Capacity Organization	Power Ratio Creation Time Action 🚳
🗟 Org & User 🗸 🗸 🗸		



b. Click "Create Owner", fill in the owner information, and then click "Confirm".

Please bind current owners or add new owners of the plant.	
A Create Owner 3	

					×
* Login .	Account:	Enter		Select Another Owner	
* P	Password :	Enter the password		ø	
* Fu	ull Name:	Enter			
Contact	Number:	Enter			
	Email:	Enter			
	*	The email address will be used to re in email address.	set the password when yo	u forget your password. V	/e recommend that you enter

c. Click "Next  $\rightarrow$  Add Device", fill in the DTU serial number, and then the inverter serial number will be automatically recognized. After that, click "Next" to go to the final step.

ista)					
Login Account	Name	Contact Number	Email	Creation Time	Action
insta1	Li			2024-03-05 17:43:09	民 Edit   合 Reset Password   名 Remove
				+ Create Owner	
				Cancel	6

Add Device/Layout (for insta)		
	Oevices	2     Layout Design     3     Upload Installation Map
		There is no device in this plant, please add.
		+ Add Device

Add Device			×
* DTU SN:	Enter SN Cannot be empty		
* Inverter SN :	Enter SN	8	
		Cancel	Save

DTU	Inverter	Action
30122480680	200422400260	🖉 Edit   🗇 Delete
		+ Add Device

d. Fill in the plant regulation information and click "Complete and activate the plant" to finish the plant creation.

int Regulation	Plant Revenue		
		Plant Name : insta test plant	
		Currency: Select V	
		D Electricity Price per Unit	
		Buy: Enter a number.	
		Sell: Enter a number.	
	More Setting		

#### 4.2.2 Edit Plant Basic Information

You can directly choose the plant you want to edit, or search it according to device name/ID, click the "Settings" button on the left side of the Plant O&M, and then edit the information you want to change.

Anstagen	Ξ ٩ ⊕ 🖲	
	Plant List My Favorites Plant Map	
🗄 Plant	System Type: V Plant Status V Plant Name V Enter plant name Q Advanced Filter V	
	Plant ID Plant Name Status Capacity Organization Power Ratio Creation Time Action B	
	3667730 🐨 🖬 10kW Test_L = 2024-03-06 🛛 🛃 🌶	
	3651410 📷 A 10kW Test,L » 2024-03-05 (1)o	
	4 · · · · · · · · · · · · · · · · · · ·	

InstaGen	Ξ	Plant O&M	Х
🗄 Home	Plant List My Favorites Plant Map	Plant Name :	Capacity: 10 kW
🗇 Plant	System Type V Plant Status V	Organization :	Owner:
ж 0&м	Plant ID Plant Name	Plant Type: Residential Plant (Single Array)	Installation Time: 2024-03-06 04:31:26 (UTC+02)
🖽 Org & User 🛛 👻	3662730	Address: UK	
		Current Power: • No data.	
	3651410	Plant O.P.M: Construmt	Q Technolog Oliver
		so atomys	A name rank
		EBI Advanced Settings	Delete

Instagen	3	۹ 🛛 🔿
⊞ Home	🕜 Dashboard 😚 Devices 🐻 Report 🎯 Settings	Plant Name:
🛱 Plant	✓ Information	
≫ O&M ~~	Basic Information Plant Name : Capacity: 10 kW Country/Region: Pollar/ Joodiarpackie Addres: UK Country/Region: Pollar/ Joodiarpackie Country	Eda
	Current Owner: instagen, ex	Edit
	Devices DTU Quantity: 1 inverter Quantity: 1	Edit
	✓ Smart Control Settings	
	Eaterry simple control Entry vertiget control make. Career factors of Conservation Make Dry Control Conservation Make	Edit
	Integrated day contact can be used for multiple functions	Edit

윤 Home 중 Plant	2	Owner				
		Current Owner:	ſ	Edit	]	
ж. ови ~	<ul> <li>Device/Layout</li> </ul>				F.	
B Org & User ~		Devices DTU Quantity: 1 Inverter Quantity: 1		Edit		
·	<ul> <li>Smart Control Setting</li> </ul>	s Rates Seat Costrol				l
	(O)	Markey shttligest cottat mobile. Current Settings Self Consumption Mode		Edit		l
		Dry Contact Configuration Integrated day contact can be used for multiple functions Content Settings: None		Edit		l
·	<ul> <li>More Setting</li> </ul>					l
		Plant Regulation Bectricity Price per Unit: None Allow Owner to View Lepout: Vies		Edit		

\* For details of Smart Control Settings, please refer to <u>Chapter 5</u>.

#### 4.2.3 Transfer a Plant to Another Organization

Select "O&M" on the right side of the plant list, click the "Transfer Plant" button, choose the new organization that you want to transfer to, and then click "Confirm".

InstaGen	<u></u>	Plant O&M	×
쉾 Home	Plant List My Favorites Plant Map	Plant Name :	Capacity: 10 kW
🗇 Plant	System Type V Plant Status V	Organization:	Owner:
ж orm ~	Plant ID Plant Name	Plant Type: Residential Plant (Single Array)	Installation Time: 2024-03-06 04:31:26 (UTC+02)
🗒 Org & User 🗸 💡	3662730	Address: UK	
	3651410	Current Power:   No data.	
		Plant OBM:  Sttings	A Transfer Plant
		Advanced Settings	Delete

#### 4.2.4 Update the Profile of Inverter

Choose the plant of which you want to update the profile, and then click the "Advanced Settings" button on the left side of the Plant O&M. You can change the parameters within a certain range, and then click "Confirm".

	Ξ	Plant O&M	×
	Plant List My Favorites Plant Map	Plant Name :	Capacity: 10 kW
🗇 Plant		Organization:	Owner:
	Plant ID Plant Name	Plant Type: Residential Plant (Single Array)	Installation Time: 2024-03-06 04:31:26 (UTC+02)
	3662730	Address: UK	
	3651410	Current Power: = No data.	
		Plant O&M:  Settings	A Transfer Plant
		1 Advanced Settings	Delete



When ESS Safety Config is performed, please first choose the corresponding grid code in your region. In other regions, you can adjust parameters in accordance with local grid standards.

Insta <u>Gen</u>	Ξ	Plant O&M	Advanced Settings			×
😰 Home	Plant List My Favorites Plant Map	Plant	ESS Advanced Config ESS Safety Con	lig		
🗇 Plant		Organi	Name	Value	Unit	Range
X 08M				EU_EN50549 ^		
	Plant ID Plant Name		Safety	EU_EN50549		
tai org acusar 🔹 🗸	3651410	A	Safety Nominal Voltage	DE_VDE4105 AU AS4777 A	v	230~230
	3638020	Current	Safety Nominal Frequency	AT_TOR	Hz	50~50
	3561970	Flant	DRM Function Activated	PL_EN50549 EE_EV5_EN50549		
	4		Anti-Islanding Function Activated	HU_EN50549		
			Voltage Ride Through (VRT)	AU AS4777 B 👻		
			VRT Function Code	2166		0~65535
			High Voltage 2 (HV2)	264.5	v .	230~299
			Maximum Trip Time (MTT)	0.1	s	0.1-5
			High Voltage 1 (HV1)	264.5	v	230-276
			Maximum Trip Time (MTT)	0.1	s	0.1~100
			Low Voltage 1 (UV1)	184	v	46~230
			Maximum Trip Time (MTT)	0.1	s	0.1~100
			Low Voltage 2 (LV2)	103.5	v	46-230
			Maximum Trip Time (MTT)	0.3	5	0.1~5
			10 mins Average High Voltage (AHV)	253	v	230~264.5
			Function Activated	Finable v		
						Cancel Confirm

#### 4.2.5 Delete a Plant

Choose the plant you want to delete, and then click the "Delete" button on the left side of the Plant O&M. To delete a plant, you will need to first delete all devices under this plant.

9nstaGen	Ē	Plant O&M	×
	Plant List My Favorites Plant Map	Plant Name :	Capacity: 10 kW
🗇 Plant		Organization:	Owner:
	Plant ID Plant Name	Plant Type: Residential Plant (Single Array)	Installation Time: 2024-03-06 04:31:26 (UTC+02)
	3662730	Address: UK	
	3651410	Current Power: e No data.	
		Plant O&M:   Settings	A Transfer Plant
		印 Advanced Settings	

#### 4.2.6 Add a Plant to Favorites

Choose the plant that you want to add to your favorites and click "Favorite".

InstaGen	Ξ
	Plant List My Favorites Plant Map
🗇 Plant	System Type V Plant Status V Plant Name V Enter plant name Q Advanced Filter V
	Plant ID Plant Name Status Capacity Organization Power Ratio Creation Time Action
	3662730 🐖 104W Tert,L 2024-03-66 😢 🖉 🖄
	3651410 💉 • 2004-03-05 🛛 🖒 🖒 🗘
	4

#### 4.2.7 Check the Various Data of Device

Choose the plant, select "View", and click "More" or "Energy Storage Inverter".





erter Event Query (Data Update: 2024	-03-06 07:37:30)			
🔒 Loads 🖀 Battery	🛄 Energy Storage Inverter			
Master-Slave : Single	Phase A Voltage : 244.8V			
Working Status : On-grid Mode	Phase A Current : 1.1A			
Power Fault Code : 0	Phase A Active Power : -23W			
Safety Fault Code : 0	Phase A Reactive Power : 587Var			
requency : 50.1Hz	Phase-A DC Injection Current : -2mA			
solation Resistance : 5000kΩ	Phase-A DC Offset Voltage : -15.8mV			
.eakage Current : 3mA	EPS Phase-A Voltage : 244.4V			
DRM Mode : 1	EPS Phase-A Current : 0.26A			
Arc Fault Flag: 0	EPS Phase-A Active Power : -6W			
nternal Ambient Temperature : 20°C	Total Bus Voltage : 389.9V	Battery Voltage : 53.2V	Internal Fan Speed : ORPM	
№ Heatsink Temperature : 12°C	Positive Bus Voltage : 194.9V	Battery Current : -0.6A		
nverter Heatsink Temperature : 14°C	Negative Bus Voltage : 194.9V	Battery Power: 0W		
Arc Self-check OK Flag : 0				

#### 4.3 O&M

The O&M page includes device list, alarm query, report query, and grid profile management.

Insta <u>Gen</u>	ē						Q	8 <u>R</u>
⇔ Home	DTU Micro	Inverter RSD	Optimizer	Meter Device R	eplacement Record			
Plant	Select plant		Software Version No.	Enter SN	Q, Search			
жо&м ^	DTU-SN	Status	Plant	Device Ver.	Model	Hardware Ver.	Software Ver.	Action
🕒 Device List		Online		Gen3	DTS-WIFI-G1	H11.01.01	V01.00.01	8 /
🔟 Alarm Query								
Report Query								
¶⊢ Grid Profile Management								
🗟 Org & User 🛛 👻								

#### 4.3.1 Device Information Query

Click "Device List  $\rightarrow$  DTU", and then click "View" to view device details.

InstaGen	Ξ.				۹ 🕲 🙁
	DTU Micro	Inverter RSD Optimizer	Meter Device Replacement Record		
	Select plant	Software Version No.	Enter SN Q Search		
ж оам ^	DTU-SN	Status Plant	Device Ver. Model	Hardware Ver.	Software Ver. Action
යි. Device List		Online	Gen3 DTS-WIFI-G1	H11.01.01	vo1.00.01
					Ŭ

# 4.3.2 DTU Maintenance

Click "Device List  $\rightarrow$  DTU", choose the DTU SN and click "Device Maintenance".

<b>Instagen</b>	Ē						م	
읍 Home	DTU Micro	Inverter RSD	Optimizer	Meter Device R	eplacement Record			
🛱 Plant	Select plant		Software Version No.	Enter SN	Q. Search			
ж оам ^	DTU-SN	Status	Plant	Device Ver.	Model	Hardware Ver.	Software Ver.	Action
Device List		Online		Gen3	DTS-WIFI-G1	H11.01.01	V01.00.01	∞⊿(1)
道 Alarm Query								-
Report Query								
角 Grid Profile Management								
回 Org & User 🛛 🖌								

#### 4.3.2.1 Restart the DTU

Click "Device List  $\rightarrow$  DTU", choose the DTU SN, and then click "Device Maintenance  $\rightarrow$  Restart".

Insta <u>Gen</u>	E	Device Maintenance	×
📾 Home	DTU Micro Inverter RSD	DTU-SN:	Creation Time: 2024-02-28 09:29:39 (UTC)
曲 Plant	Select plant	Plant:	Hardware Ver.: H11.01.01
ж овм ^	DTU-SN Status Plant	Software Ver.: V01.00.01	
🔁 Device List	Online	Device Maintenance: C Restart	Restore Default Settings
Alarm Query		Stop Processing Command	Firmware Upgrade
I Report Query			
引: Grid Profile Management		Replace Device	
(f) Og & ther →			

### 4.3.2.2 Restore the DTU Default Settings

Click "Device List  $\rightarrow$  DTU", choose the DTU SN, and then click "Device Maintenance  $\rightarrow$  Restore Default Settings".

<b><sup>G</sup>insta<u>Gen</u></b>	E		Device Maintenance			×
là Home	DTU Micro	Inverter RSD	DTU-SN:		Creation Time: 2024-02-28 09:29:39 (UTC)	
⊞ Plant	Select plant	✓ ] [so	Plant:		Hardware Ver.: H11.01.01	
ж 08M ^	DTU-SN	Status Plant	Software Ver.:	V01.00.01		
3. Device List		Online	Device Maintenance:	C Restart	Restore Default Settings	11
首 Alarm Query				Stop Processing Command	Firmware Upgrade	
Report Query				Replace Device		
君。Grid Profile Management						
I Org & User *						

#### 4.3.2.3 Stop the Processing Command of DTU

Click "Device List  $\rightarrow$  DTU", choose the DTU SN, and then click "Device Maintenance  $\rightarrow$  Stop Processing Command".

Instagen	Ē		Device Maintenance			×
😂 Home	DTU Micro	Inverter RSD	DTU-SN:		Creation Time: 2024-02-28 09:29:39 (UTC)	
⊕ Plant	Select plant		So Plant:		Hardware Ver.: H11.01.01	
жовм ^	DTU-SN	Status P	Software Ver.:	V01.00.01		
O Device List		Online	Device Maintenance:	C Restart	Restore Default Settings	
jiji Alarm Query			(1)	Stop Processing Command	G Firmware Upgrade	
Report Query     Grid Reafile Management				Replace Device		
Org & User						

#### 4.3.2.4 Upgrade the DTU Firmware

Click "Device List  $\rightarrow$  DTU", choose the DTU SN, and then click "Device Maintenance  $\rightarrow$  Firmware Upgrade".

Instagen	Ξ		Device Maintenance		×
	DTU Micro In	verter RSD	DTU-SN:		Creation Time: 2024-02-28 09:29:39 (UTC)
曲 Plant	Select plant		Plant:		Hardware Ver.: H11.01.01
ж овм ^	DTU-SN	Status Plant	Software Ver.:	V01.00.01	
Device List		Online	Device Maintenance:	C Restart	Restore Default Settings
Alarm Query				Stop Processing Command	(1
Report Query				G sup rocessing command	dy remain oppose
8 Grid Profile Management				Replace Device	
🗉 Org & User 🛛 👻					

#### 4.3.2.5 Replace the DTU

Click "Device List  $\rightarrow$  DTU", choose the DTU SN, and then click "Device Maintenance  $\rightarrow$  Replace Device".

Prista Gen E Device Maintenance	>
Home DTU Micro Inverter RSD DU-SH:	Creation Time: 2024-02-28 09:29:39 (UTC)
🖶 Plant 🗸 Select plant	Hardware Ver.: H11.01.01
X 08/M A Software Ver.: V01.00.01	
Device Ust     Online     Device Maintenance:     C Restart	😨 Restore Default Settings
Alarm Query     Sop Proceeding Command	Firmware Upgrade
1) Report Query	
<ol> <li>Grid Profile Management</li> </ol>	
(E) Org & User *	

#### 4.3.3 Inverter Maintenance

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and click "Device Maintenance".

Instagen	Ē				م	
습 Home	DTU Micro	Inverter RSD Optimizer	Meter Device Replacement Record			
⊞ Plant	Select plant	1 Enter SN	Q. Search			
ж оем ^	Inverter SN	Status Plant	Device Ver. Model	Hardware Ver.	Software Ver. (System)	Action
O Device List		Online	Gen1 INS-3.6LV-EUA1-WIFI		V01.00.08	∞ (2)
道 Alarm Query						Ŭ
图 Report Query						
1 Grid Profile Management						
i Org & User Υ						

#### 4.3.3.1 Turn on the Inverter

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Turn On".

Instagen	₫		Device Maintenance	×
	DTU Micro	Inverter RSD	Inverter SN:	Creation Time: 2024-02-28 09:42:07 (UTC)
			Plant:	Hardware Ver.: -
	Inverter SN	Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
🕤 Device List		Online	Software Ver. (Safety): V01.02.23	
			Device Maintenance: () Turn On	() Turn Off
			C Restart	Restore Default Settings
			🔀 : Clear History	Upload real-time data.
			B Search Device	Select Battery Type
			Delete Delete	
			U MAR MAR	

#### 4.3.3.2 Turn off the Inverter

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Turn Off".

	≡				Device Maintenance			×
	DTU	Micro	Inverter	RSD	Inverter SN:		Creation Time: 2024-02-28.09:42:07 (UTC)	
					Plant:		Hardware Ver.: -	
		Inverter SN	Status	Plant	Software Ver. (System): \	/01.00.08	Software Ver. (Power): V01.04.40	
🕒 Device List			Online		Software Ver. (Safety): \	01.02.23		
					Device Maintenance:	③ Turn On	() Turn Off	$  \square  $
						C Restart	Restore Default Settings	
						P2. Clear History	<ul> <li>Divised real-time data</li> </ul>	
						R cauch Daria	Colord Balance Terro	
						Di, Search Device	<ul> <li>Select Battery type</li> </ul>	
						Delete Device		

#### 4.3.3.3 Restart the Inverter

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Restart".

Instagen	······································	Device Maintenance	>
	DTU Micro inverter RSD	Inverter SN:	Creation Time: 2024-02-28 09:42:07 (UTC)
	Select plant	En Plant:	Hardware Ver.: -
	Inverter SN Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
O Device List	• Online	Software Ver. (Safety): V01.02.23	
		Device Maintenance: () Turn On	() Turn Off
		C Restart	Restore Default Settings
		Clear History	Upload real-time data.
		E Search Device	Select Battery Type
		Delete Device	

#### 4.3.3.4 Restore the Inverter Default Settings

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Restore Default Settings".

Instagen	Ē	Device Maintenance	X
🗇 Home	DTU Micro Inverter RSD	Inverter SN:	Creation Time: 2024-02-28 09:42:07 (UTC)
Plant	Select plant	Plant :	Hardware Ver.: -
ж о&м ^	Inverter SN Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
Device List	Online	Software Ver. (Safety): V01.02.23	
道 Alarm Query 間 Report Query		Device Maintenance: () Turn On	(D) Turn Off
<ol> <li>Grid Profile Management</li> </ol>		C Restart	Restore Default Settings
🖂 Org & User 🗸 🗸		Clear History	Opload real-time data.
		Search Device	Ø Select Battery Type
		Delete Device	

#### 4.3.3.5 Clear the History of Inverter

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Clear History".

Instagen	E	Device Maintenance	×
≙ Home	DTU Micro inverter RSD	Inverter SN:	Creation Time: 2024-02-28 09:42:07 (UTC)
@ Plant		Plant:	Hardware Ver.: -
жовм ^	Inverter SN Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
🕒 Device List	Online	Software Ver. (Salety): V01.02.23	
🚊 Alarm Query.		Device Maintenance: () Turn On	() Turn Off
Report Query     Refine Management		C Restart	Restore Default Settings
Org & User		Clear History	Opload real-time data.
		🕄 Search Device	Select Battery Type
		Delete Device	

#### 4.3.3.6 Upload the Real-time Data

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Upload real-time data".

Instagen		Device Maintenance	×
⊜ Home	DTU Micro Inverter RSD	Inverter SN: Greation Time: 2024-02-28.09:42:07 (UTC)	
🖶 Plant		En Plant: Hardware Ver.: -	
жовм ^	Inverter SN Status Plant	Software Ver. (System): V01.00.08 Software Ver. (Power): V01.04.40	
🔁 Device List	Online	Software Ver. (Safety): V0102.23	
道 Alarm Query		Device Maintenance: () Turn On () Turn Off	
图 Report Query		C Restart 🖾 Restore Default Settings	
角 Grid Profile Management		🖪 Clear History 🐵 Upload repl-time data.	1)
🖾 Org & User 🛛 👻		E Search Device D Select Datery True	<u> </u>
_			
_		Delete Device	
_			
_			
_			
_			
_			

#### 4.3.3.7 Search the Device

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Search Device".

InstaGen	₫	Device Maintenance	×
	DTU Micro Inverter RSD	Inverter SN:	Creation Time: 2024-02-28 09:42:07 (UTC)
		Plant :	Hardware Ver.: -
	Inverter SN Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
🕤 Device List	Online	Software Ver. (Safety): V01.02.23	
		Device Maintenance: ① Turn On	() Turn Off
		C Restart	Restore Default Settings
		🔀 Clear History	Upload real-time data.
		1 B Search Device	Select Battery Type
		ft. Delete Device	

#### 4.3.3.8 Select the Battery Type

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Select Battery Type".

<ul> <li>Bome</li> <li>Plant</li> <li>X 0&amp;M</li> </ul>	DTU Micro	Inverter	RSD	Inserter SN:		
A Home B Plant X O&M ^	DTU Micro	Inverter	RSD	Insector SN1		
⊞ Plant A						Creation Time: 2024-02-28 09:42:07 (UTC)
ж ови 🔹 🔨			V En	Plant:		Hardware Ver.: -
	Inverter SN	Status	Plant	Software Ver. (System): V	01.00.08	Software Ver. (Power): V01.04.40
Device List		Online	-	Software Ver. (Safety): V	01.02.23	
道 Alarm Query				Device Maintenance:	O Turn On	( <sup>1</sup> ) Turn Off
別 Report Query					-	-
引 Grid Profile Management					C Restart	13 Restore Default Settings
🗉 Org & User 🗸 🗸					Clear History	Upload real-time data.
_					🗒 Search Device	Select Battery Type
_						

#### 4.3.3.9 Delete the Device

Click "Device List  $\rightarrow$  Inverter", choose the Inverter SN, and then click "Device Maintenance  $\rightarrow$  Delete Device".

9nsta <u>Gen</u>	亘		Device Maintenance	×
⊜ Home	DTU Micro	Inverter RSD	Inverter SN:	Creation Time: 2024-02-28.09:42.07 (UTC)
🕮 Plant			Plant:	Hardware Ver.: -
ж овм ^	Inverter SN	Status Plant	Software Ver. (System): V01.00.08	Software Ver. (Power): V01.04.40
🕤 Device List		Online	Software Ver. (Safety): V01.02.23	
🚊 Alarm Query			Device Maintenance: () Turn On	() Turn Off
Report Query			C Restart	23 Restore Default Settings
考 Grid Profile Management			🔀 . Clear History	Upload real-time data.
🐵 Org & User 🔍 🗸			R Search Device	Select Battery Type
			1 Delete Device	

#### 4.3.4 Alarm Query

Click "Alarm Query" to check the current alarms and alarm history.

Instagen							۹ ۲ 🖲 🚽
	Current Alarms Alarm History						
	Micro V Select plant			V Enter SN	9, Search		
ж ови	Micro-SN	Plant	Alarm Name		Alarm Data	Action	
C Device List							
E Alarm Query							
Grid Profile Management							
⊟ Org & User ~							

# 4.3.5 Report Query

Click "Report Query" to check the power report and energy report.

Instagen	<u>a</u>	
	Report Query	
Alarm Query	• • •	g
Report Query     Grid Profile Management	Prower Report	Fnemy Report
	Point Report	Lingy report

#### 4.3.6 Grid Profile Management

Click "Grid Profile Management" to check the grid profile. And you can click "Edit" to edit the grid profile.

Instagen	U						۹ 🔮 🔞			
位 Home	Grid Profile Management	Grid Profile Management								
жовм ^					Q. Search					
S Device List	File Name	Alias	Device Ver.	Country	Version N	4o. Creation Time	Action			
E Alarm Query	China_NBT_32004_H		Gen2	China	1.0.0	2018-10-29 16:38:10	2 tot			
Report Query	CN_HRCLP_220V		Gen3	China	2.0.0	2023-01-16 16:43:27	∠ tok			
8: Grid Profile Management	CN_NBT32004_2018		Gen3	China	2.0.0	2020-07-07 16:54:13	£ Lik			
🗏 Ong & User 🦷 🔪	CN_N8T32004_2018_zibanben		Gen3	China	2.0.0	2023-11-03 18:17:05	Z 100			
(1)	LN_50Hz		Gen2	China	1.1.0	2018-10-29 14:54:34	∠ tak			
	UN_50Hz		Gen2	United Kingdom (UK)	1.1.0	2010-10-29 14:54:34	∠ tds			
	LN_60Hz		Gen2	China	1.0.0	2021-01-19 17:12:31	∠ tak			
	LN, 60Hz		Gen2	China	1.0.1	2024-01-25 12:23:03	🖈 Edit   🖾 Allas   🛈 Delete			
	UK_683		Gen2	United Kingdom (UK)	1.1.0	2018-10-29 14:54:34	∠ tik			
	UK_G98		Gen3	United Kingdom (UK)	2.0.1	2020-10-21 10:37%7	∠ tok			
							Stat 11 entries ( 1 2 ) 10/pager			

### 4.4 Org & User

The Org & User page includes organization management, Org. User management and owner management.

<b>InstaGen</b>	ē		۹ 🕲 횑
	Organization Management		
	Enter org. name. 9. Search		+ Add Ornanization
		•	
🗉 Org & User 🔷 🔨	Name	type	Action
R Organization Management	Test_L	ê∖ Installer	
🖂 Org. User Management			Total 1 entries < 🔳 >

#### 4.4.1 Organization Management

#### 4.4.1.1 Create Organization

Click "Add Organization", fill in the details of the organization user, and then click "Confirm" to complete the account creation.

InstaGen	<b>a</b>			۹ 🕲 👂
	Organization Management			(1)
	Enter org. name. Q. Search			+ Add Organization
🗐 Org & User 🔷 🔿	Name		Туре	Action
R Organization Management	Test_L		∲u Installer	2 2 1 4 1 0
E Oro Liter Management				Total 1 entries < 1 >
A Our Management				
<ul> <li>Owner Management</li> </ul>				
InstaGen	E	Create Organization		х
🕼 Home	Organization Management	* Name:	Enter	
🜐 Plant		* Type:	Select V	
ж овм — ~	Enter org. name.			
🗊 Org & User 🔷 🗠	Name	Country:	Select Y	
器 Organization Management	Test_L	Region :	Select V	
Org. User Management		Contact:	Enter	
39, Owner Management		Contact Number:	Enter	
		Address:	Enter	
		Address: Organization Introduction:	Enter .	
		Address: Organization Introduction:	Enter Enter	
		Address: Organization Introduction:	Deter	
		Address: Organization Introduction:	Driver	
_		Address: Organization Interduction: Organization Logio:	tone tone	
		Address: Organization Introduction: Organization Logo:	Enter Enter Utilität Picture	
		Address : Organization introduction : Organization Logo :	Enter Enter Update Petere	
		Address : Organization Introduction: Organization Logo:	Enter Enter Upfaul Potver	2

#### 4.4.1.2 Organization Management

In this page, you can check, edit, transfer, and delete the organization.

InstaGen	ī		Q (B)
🛱 Home	Organization Management		
🕮 Plant	Satur our manne		
ж 08м			And Organization
🗟 Org & User 🔷 🔨	Name	Type	Action
Organization Management	<ul> <li>1655_L</li> </ul>	ø. Installer	Ba 1 2 1 7 1 0
Org. User Management	Test_I	8 Regular	
& Owner Management			Total 2 entries < 1 >

#### Note:

The PV plant cannot be transferred when one owner account is used by multiple PV plants. If one of the PV plants will be transferred, please first remove the owner account from other PV plants.

#### 4.4.2 Org. User Management

In this page, you can add organization users:

a. Select "Org. User Management", select and click the organization name you just created on the left, and then click "Add Organization Users".

Instagen	Ē							۹	R
a Home	Organization		Organization User					1	)
Plant	Enter org. name.	٩		V Enter em		Enter account	Q Search	+ Add Organiz	ation Users
⊡ Org & User ^	□ & Test_L □ & Test_l		Display users of	subordinate organia	cations				0
R Organization Management			Login Account	Name	Organization	Type	Creation Time	Action	
Org. User Management									
条 Owner Management						No data.			

b. Fill in the details of the organization user and click "Confirm" to complete the account creation.

Instagen	查		Create Organization User	×
🛆 Home	Organization	Organ	Organization: Test_1 (Regular)	
🕮 Plant		Source	Login Account: Enter	
X O8M ≚	C & Test_L	• •	Password: Enter	
品 Organization Management		Login	Enter the password	
<ul> <li>Org. User Management</li> </ul>			INOTHE: Enter	
<ol> <li>Owner Management</li> </ol>			Contact Number: Enter	
			Enail: Cover * The email address will be used to reset the password when y an email address.	ou forget your password. We recommend that you enter
				2
				Cancel

#### 4.4.3 Owner Management

In this page, you can check and edit the account information, reset the account password, and delete the account.

Instagen	Ē				9 ® R
	Organization	Owner			
	Enter org. name. Q	Enter email address Enter account	Q Search		
	🗈 💩 Test_L	Display users of subordinate organizations			0
Org & User ^	🗅 🔒 Test. J				
		Login Account Name	Organization	Creation Time	Action
		A	Test_L	2024-03-06	81∠1810
冬. Owner Management		A	Test_L	2024-03-05	□ 2 0

# 5. Smart Control Settings

#### 5.1 Battery Smart Control

Choose the plant where you want to change the system mode and click "Settings". Click the "Edit" button of Battery Smart Control under Smart Control Settings. Only one control mode can be selected at a time.

Instagen		۹ 🕸 횑
금 Home B Plant	Owner Current Owner:	Edit
	✓ Device/Layout	
© Org & User ✓	Devices DTU Quantity: 1 Inverter Quantity: 1	Edit
	✓ Smart Control Settings	
	Battery Smart Centrol Entry Intelligence control module. County Stronger Concuration Mode	Edit
	Dry Contact Configuration Integrated by contact can be used for exaligite functions Current Stetringe Noise	Edit
	✓ More Setting	
	Plant Regulation Electricity Price pur Unit: None Allow Gamer to View Lupout: Yes	Edit

#### 5.1.1 Self-consumption Mode

In the daytime, solar energy supports the loads first, and surplus energy is stored in the battery. When the battery is fully charged or reaches the maximum charge power, the surplus energy is fed into the grid (or limited if required). At night, the battery discharges for the loads first, and the grid will supply the loads once the battery power is not enough. In this mode, the battery cannot be charged from the grid at night. The self-consumption mode can reduce the use of grid power. Solar energy is preferentially supplied to the load, charged to the battery, and fed into the grid last. You can set reserve capacity within a certain range in the case of infrequent power outages, and then click "Save".

Instagen	E.	۹ 🕸 🗷
ය Home	Sattery Smart Control (insta test plant)	
🕮 Plant	Self-Consumption Mode	
X ORM	Minimize the use of grid electricity, solar energy is preferentially supplied to the load, then charged to battery, and last fed to grid.	
🖼 Org & User	Reserve Capacity A small amount of power can be reserved due to independ power outrages (10-100)	30 % 2
	Economical Mode Also knows as time of the mode, which wateries electroly saving by triffing heney usage to avoid using grid electroly at post hours.	
	Full Backup Mode Use for any with hequest paid andrys, battery only dischargen during a grid nutrage.	
	Pure Off-Grid Mode Use of Several Karana and Several Sever	
	Force Charge Mode Use d'servery table balow data force, or obvious generalizationing.	
	Force Discharge Mode Use If strikey rises adves rate for C, or during communitiesing	
	Cencel Surv 3	

#### 5.1.2 Economical Mode

In this mode, battery charging and discharging periods need to be defined. Meanwhile, the battery can be forced to charge from the grid during the preset charging time. For instance, the battery could be charged or discharged according to valley or peak electricity prices. You can set reserve capacity within a certain range in the case of infrequent power outages and select the type of currency you need. Meanwhile, You can set different time periods to be more flexible to save costs of electricity. Click "Edit" to set the time period for peak, low, and partial peak grid prices in different seasons or dates, but you can just add up to four time periods, and then click "Save".

Instagen		9 B B
⊕ Home	Battery Smart Control	
🖶 Plant	Self-Consumption Mode	
X OSM V		
us org a user *	Economical Mode Also known as Time el-Use mode, which musimize electricity using by shifting bettery usage to avoid using grid electricity at peak hours.	
	Reserve Capacity. A small ansast of power can be reserved due to infequent power budget (10-100)	10 % 2
	Currency Selet onney	GBP V 3
	Time of Use Set two particle to park and well whetherby prices, and twit prices.	11) Themp() Selected Left
	Full Backup Mode the for any with theyant got independently defined within a got antigene	
	Pure Off-Grid Mode Use 7 these is to assess to got.	
	Force Charge Mode Use Tamey Mit below with Sc2 or during conventioning	
	Force Discharge Mode Use Famey view does with StoC or during conventioning.	
	Cancel Same 5	

	Electricity rate 1					
Select a time period. (0) 02-28						
Time Range 1		Mon X T	ue X V	Ned >	Thu X	
Peak Hour	Start:	04:31		End:	00:29	
	£/kWh Buy:	0.28		Sell:	0.15	
Off-Peak Hour	Start:	00:30		End:	04:30	
	£/kWh Buy:	0.15		Sell:	0.15	
Partial-Peak Hour	£,/kWh Buy:		nber.	Sell:		iber.
Time Range 2		Sat × Su	n X			
Peak Hour	Start:	04:31		End:	00:29	
	£/kwh Buy:	0.28		Sell:	0.15	
Off-Peak Hour	Start:	00:30		End:	04:30	
	£/kwh Buy:	0.15		Sell:	0.15	
Partial-Peak Hour	£,kwh Buy:	Enter a nur	nber.	Sell:	Enter a nun	iber.
		_				

If you want to delete one of the time periods, just click "delete" in the top right corner and click "Save".

Select a time period. ⑦	Select date 📋 <b>To</b> Select date 🗎
Time Range 1	
Peak Hour	Start: Select time () End: Select time ()
	£/k\th Buy: Enter a number. Selk Enter a number.
Off-Peak Hour	Start Select time I End Select time
	£/kWh Burge Enter a number. Selk Enter a number.
Partial-Peak Hour	£/Wh Buy: Enter a number. Selk Enter a number.
Time Range 2	
Peak Hour	Start: Select time () End: Select time ()
	£/kWh Buy: Enter a number. Sell Enter a number.
Off-Peak Hour	Start Select time I End Select time
	£/kkh Buy: Enter a number. Selk Enter a number.
Partial-Peak Hour	£/wh Buy: Enter a number. Selk Enter a number.
	+ Add Item

#### 5.1.3 Full Backup Mode

Full backup mode can be selected when the grid frequently breaks down. The battery will be forced to charge to a set capacity so that it has enough power to support the electricity consumption in daily life when the inverter is in off-grid mode. You can also set the reserve capacity within a certain range and click "Save".

finstagen	I	Q @ (R)
	C Battery Smart Control (Greenwood House)	
∰ Plant X O8M ~	Self-Consumption Mode Unions on a unit of planning, was reading applicates on total dise disagrees barry and the fait is get	
🐻 Org & User 🛛 👻	Economical Mode Associate Theory Carendo white humanitae interesting sampling butting barray sampling and using grid interesting or post through	
	Full Backup Mode Use for available transport of distances lating and astropy.	1
	Restore Capacity function of the ret value (00-100) 80	* 2
	Pure Off-Grid Mode	
	Force Charge Mode to 2 Advertised and a second seco	
	Force Discharge Mode the Plattey view daws set for C, and any conventionency	
	Cancel Snee	

# 5.1.4 Pure Off-grid Mode

When the system is not connected to the grid, you can choose the pure off-grid mode and click "Save".

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	Battery Smart Control (Greenwood House)	
B Plant Xt ORM ⊻	Self-Consumption Mode Weikling the use of pull dealeds, sale energy is protected to page for load to be a specific to be used and both to pull	
🗷 Org & User 🗸 🗸	Economical Mode Alls hows a The drift make which wainlike electricity unity by Kitting latency usage to wold along pld electricity or push house.	
	Full Backup Mode use to area with heyers get average, being only disharge during a get sheap.	
	Pure Off-Grid Mode Use 2 New York to glid.	
	Force Charge Mode the Phany Inh later while C or Array commissions	
	Force Discharge Mode the Plattery free door sub-Sic or during recentationing	
	Cancel Sove (2)	

#### 5.1.5 Force Charge Mode

The force charge mode can be used during the commissioning of the inverter or when the battery capacity falls below the value of safety SOC. You can set the reserve capacity within a certain range. If the battery capacity is lower than the setting, the battery will be forcibly charged. You can set the charge power of the battery if needed. Finally, save the values you have changed.

Instagen	ц.	۹. 🖶 😣
🕸 Home	Battery Smart Control (Greenwood House)	
B Plant           X: ORM         ~	Self-Consumption Mode Monoton was all and extended, salar energy's performability sogetief to the lead, then charged to latence, and lead for its sold.	
🗊 Org & User 🛛 🗸 🗸	Economical Mode Real bios as Tread to make which real-train electrony using by Writing briefly using the average of electrony or part from.	
	Full Backup Mode that for any with theyard poli analysis, hottes with distingue abrills a poli analyse.	
	Pure Off-Grid Mode the Prevent on access to grid.	
	Force Charge Mode Use Fluttey full behav sub fact, or during conveniencing.	
	Reserve Capacity Forelay charge the harring to the set value (10-100)	80 %
	Charge Power The charging power of the battery is not allowed to exceed this set value. (D=100)	50 %
	Force Discharge Mode Use Plattery results and State and States	
	Cancel Same 4	

#### 5.1.6 Force Discharge Mode

The force discharge mode can be used during the commissioning of the inverter or when the battery capacity rises above the value of safety SOC. You can set the reserve capacity within a certain range. If the battery capacity is higher than the setting, the battery will be forcibly discharged. You can set the discharge power of the battery if needed. Finally, save the values you have changed.

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⊕ Home	C Battery Smart Control (Greenwood House)	
B Plant X ORM ✓	Self-Consumption Mode Motors for an eligible devices, sub-everys a preferencially applied to the load, then charged to latency, and but for the paid.	
🗄 Org & User 🗸 🗸	Economical Mode state trans and train address water whether advectory serving by address yearys to avoid young you devectory or paid transm.	30
	Full Backup Mode Use for use with frequent grid readings, battery only disherings during a grid sublique.	C10-
	Pure Off-Grid Mode too if there is no interest to grid.	30
	Force Charge Mode Use Fathery Mit bries and KuC, or during convenienceing	30
	Force Discharge Mode Use Fluttery instance such tod, undering resentationing	
	Reserve Capacity Faceboy databases the hardway to the set color (00–100)	20 %
	Discharge Power The discharge power of the lastite ji not allowed to second this set value. (9–100)	50 %
	Cancel Line (4)	

# **5.2 Dry Contact Configuration**

Click the "Edit" button of Dry Contact Configuration under Smart Control Settings. Note that just one mode can be selected at a time.

<b>InstaGen</b>	3	Q 🛛 🖉
li Home	Dener	Edit
	V Device/Layout	
	Desices DTU Quantity: 1 Inverter Quantity: 1	Edit
	✓ Smart Control Settings	
	Battery Snurt Control           Image with the control module.           Come transport documentary black	Edit
	Dry Contact Configuration Weigenbel dry contact can be used for multiple functions Carnet Settings None	Edit
	✓ More Setting	
	Plant Regulation Becardop Mice per Unit: None Allow Owner to View Layout: Yes	Edit

#### Note:

- 1. The current of the DO dry contact should not be larger than 2 A.
- 2. An AC contactor must be installed between the inverter and the load.
- 3. After the inverter is powered off, the AC contactor should be adjusted manually to control the load.

#### 5.2.1 Set Earth Fault Alarm

Disable the external alarm caused by grounding insulation resistance fault or residual current fault when the load is connected.

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	Dry Contact Configuration	
B Plant X O&M	Earth Fault Alarm	
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#### 5.2.2 Set the Working Mode of Load

This setting is to control whether the load is working or not. There are five modes available as follows. (1) Switch Mode: Manually turn on or turn off the dry contact.

(2) Time Mode: Set the time period for the dry contact to work. The dry contact is closed during this set time and disconnected at other times.

(3) Intelligent Mode: Because the energy generated by PV fluctuates a lot, this mode is to make the dry contact avoid being turned on and off frequently. The dry contact will only be turned on when the residual energy generated by the PV exceeds the power set by the load within the set time period. You can set the minimum run time and the nominal power of the dry contact.

(4) Backup Load Smart Control: The unnecessary dry contact will be turned off in the off-grid situation when the battery capacity is lower than the set SoC value. You can set the value of protection SoC if needed.

(5) EV Charger Smart Control: In this mode, whether to start the EV charger can be determined based on the total input current. When the input current is less than the value of the entrance breaker size minus the EV Charger size, the EV Charger is allowed to work; when the input current is larger than the entrance breaker size, shut down the EV Charger to protect the entrance breaker.

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🕅 Home	Cry Contact Configuration	
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ж овм 🗸 🗸	Earth Fault Alarm Function: Use for esternal alarm for grounding insulation resistance foult or residual current fault.	
in Og&tun ↔	Load Control Use to lead control associates to load Section Model Time Range: Line X Tex X	Charger Smart Control © Time Renger: Smart Sam X Time Renord: 2000 0 To 12:00 0 Time Renord: 2000 0 To 12:00 0
	Generator Control Use for stacking the generator when tasking SoC is taken or back is larger under backing model.	
	Cancel	Sore

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	Ery Centact Configuration	
ж оам 🗸 🗸 🗸	Earth Fault Alarm Function: Use for external alarm for grounding insulation resistance fault current fault.	
Π OgàUser -	Load Controll     Image: Control     Image: Contr	

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⊕ Home	C Dry Contact Configuration		
B Plant X OBM ✓	Earth Fault Alarm Lectors to be obtained user for genericing inclusion resolutes tools a second cannot tool.		
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	Swith Mode ○     Time Mode ○     Intelligent Mode ○		
	Generator Control to to rearry the prevant when hardly to L to are or total it larger when hardly made.		
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☆ Home	C Dry Contact Configuration	
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	Generator Control Tork unding the predict when all tables in the latter product tables revolutions Cancel Tork	

#### 5.2.3 Generator Control

Generator control is used when there is higher power on the load side or lower battery capacity in off-grid mode. You can set the running mode and battery charge time according to your demand. When the battery capacity is below the set protection SOC, the generator will work.

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⊕ Home	C Dry Contact Configuration		
■ Plant X OBM ×	Earth Fault Alarm Totes on the Annual and the generality insulation variables to the original target fault of a variable fault of the second and the second		
🐻 Org & User 🛛 👻	Load Control Use to load random give initialized derived.		
	Generator Control Use to rating in generator when heatry fact is lower or leads is larger ander leading mode.		
	Running Mode 🕥		
	Battery Charge Time The present or will charge the kattery during the present particul. Time Previod: 0000     to 12259		
	Cancel Sever 2		

#### 5.2.3.1 Running Mode

This mode is the off-grid operation mode of the generator, including manual mode and auto mode. The manual mode is used to start or shut down the generator manually; the auto mode is used to start or shut down the generator according to the preset conditions. The auto mode only supports generators controlled by Dry Contact. Otherwise, please select the manual mode.

a. Manual Mode

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🗟 Org & User 🛛 👻	Load Control the truth constraints with ideal at second.		
	Generator Control Use to ratiog the prevalent when lattery fact is lower or hadd is larger under landage mode.		
	Running Mode      Reveal And a the grad prevalence for a set and only supports generators consoled by Dry Cantos. Otherwise, please seted the authomate.     (2)     (a) Manual Mode      · Auto Mode      ·		
	Battery Charge Time           The spream will drapp the learning due proce particit.           Time Product:         0000         10         22.55         0		
	Cancel Sove 3		

#### b. Auto Mode

Mode Parameter	Auto Mode
Battery SOC (Generator Start)	In off-grid mode, start the generator when the battery capacity is lower than the safety SOC
Battery SOC (Generator Shutdown)	In generator mode, shut down the generator when the battery capacity is higher than the safety SOC.
Quiet Time	During the quiet time, the generator is disabled.

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	Battery Charge Time The prevents with dramp for party large prevent provid. Time Particle 0000 0 to 2250 0 Cancel Sare

#### 5.2.3.2 Battery Charge Time

Enable the Generator Control, set the battery charge time, and click "Save". After this operation, the generator will charge the battery during the preset period.

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⊜ Plant Xt OBM ~	Earth Fault Alarm Laster on values are to gradedy industry existence that is residual bases task.		
🐻 Org & User 🛛 👻	Lead Control The fact and an analysis in initialized annual.		
	Generator Control Use for sacring for generator when the term of halfs is larger index backup mode.		
	Running Mode 🕥		
	Battery Charge Time The presents with charge the present present Time Present (0000)  (1) 10 10 10 10 10 10 10 10 10 10 10 10 10		
	Cancel Sove (2)		



Instagen Installer



Instagen End-user

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