Commissioning of grid-tied PV-only Enphase Energy System

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Applicable countries

- Australia
- New Zealand

Overview

This document is intended for installers who commission Enphase Energy System in grid-tied applications. Follow the steps to establish successful commissioning of the PV system.

Preparing for Enphase Installer App (Installer Toolkit) communications

The following process assumes that all IQ Microinverters have been installed in accordance with local standards and best practices, tested for appropriate voltages, and are ready to be energized.

Always follow the safety warnings and instructions for all the products in the Enphase Quick Install Guides and Installation Manuals.

NOTE: For IQ7/IQ8 Series Microinverter system commissioning, the Enphase Installer App version 3.31.X or greater and IQ Gateway software 7.6.168 or greater are required. The upgrade will be part of the commissioning if your IQ Gateway software version is less than 7.6.168. It may take approximately 20–30 minutes for a software upgrade.



You can install the Enphase Installer App using the following links:

- o <u>iOS</u>
- o <u>Android</u>

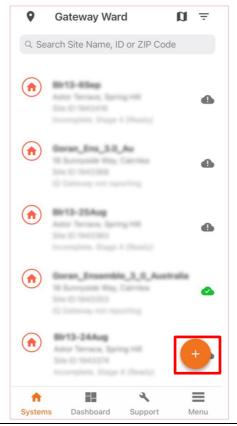
Commissioning process

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1. On the Enphase Installer App homepage, select "Systems".

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8 User Pr	ofile	(=) News					
Commu	nity	O Settings					
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U Logout							
ENPHASE V 3.29.0(18)							
↑ Systems	Dashboard	X Support	Menu				

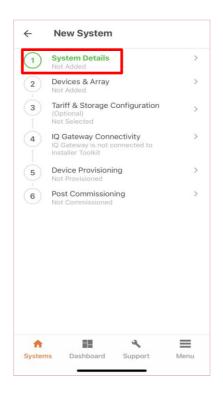
2. Tap the "+" button to create a site.



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3. In the "New System" homepage, tap "System Details" to start the wizard.



Step 1: System Details

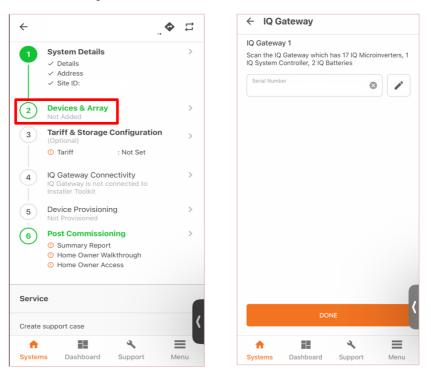
Fill in the site information and customer details.

← System Details	← System Details
System Details	
System Name *	Email *
Installer Reference ID	Address
Type Residential Commercial	Street Address *
O Others	Street Address 2
Owner Details	Country * Australia
Third party owned (ex: PPA or leased) Use this field for sites that are to be owned by a financier, or a 3rd party such as a lease or PPA provider	State * Victoria
National Meter Identifier (NMI)	City *
First Name *	Zip Code *
Last Name *	SAVE
Image: Systems Dashboard Support Menu	↑ III ▲ III Systems Dashboard Support Menu

Step 2: Devices & Array

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1. Tap "Devices & Array", then follow the prompts to scan "IQ Gateway", as shown in the following screen.



- 2. Select the grid profile, then scan the IQ Microinverters.
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NOTE: Make sure the correct grid profile AS/NZS 4777.2:2020 is selected based on the region A/B/C/NZ.



NOTE: Contact Enphase Support if a different grid profile is required with different protections settings, power quality response modes enabled, or export limit control settings.

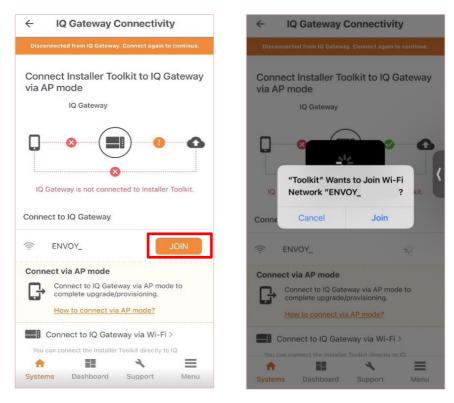
Select Grid Profile	(j	← IQ Microinverters
Current Selection AS/NZS 4777.2: 2020 Australia A Region_PIM (1.2.2)		IQ GATEWAY
Q Search Grid Profiles		Scan Device
AUSTRALIA		
S/NZS 4777.2: 2020 Australia A Region (1.2.17)	:	Scan Device
		Scan Device
S/NZS 4777.2: 2020 Australia A legion_PIM (1.2.2)	> :	Scan Device
S/NZS 4777.2: 2020 Australia B egion (1.2.17)	:	Scan Device
S/NZS 4777.2: 2020 Australia C legion (1.2.17)	:	Scan Device
egion (1.2.17)		Scan Device
		PROCEED TO CREATE ARRAY >
		I WILL DO IT LATER
↑ III ×	=	♠ ■ � ■
Systems Dashboard Support	Menu	Systems Dashboard Support Mer

Step 3: Tariff & Storage Configuration

This step is optional.

Step 4: IQ Gateway Connectivity

1. To activate and connect to the access point network, tap "JOIN".



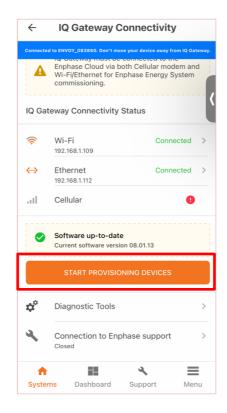


2. Once connected, the status tab changes from orange to blue, then connect the system to the customer's Wi-Fi or Ethernet.

← IQ Gateway Connectivity							
Connected to ENVOY_083860. Don't move your device away from IQ Gateway.							
Connect IQ Gateway to Enphase Cloud via Cellular Modem							
IQ Gateway successfully c Cloud and Insta							
IQ Gateway must be connected to the Enphase Cloud via both Cellular modem and WirFr/Ethernet for Enphase Energy System commissioning.							
IQ Gateway Connectivity Status							
Wi-Fi 192.168.1.109	Connected >						
↔ Ethernet 192.168.1.112	Connected >						
	<u> </u>						
Systems Dashboard	Support Menu						

Step 5: Device Provisioning

1 After any potential software update, tap "START PROVISIONING DEVICES".





2 Tap "CONTINUE" once the provisioning is complete.



NOTE: After provisioning is complete, the IQ Microinverter takes around 20-30 minutes to start production.

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Step 6: Post Commissioning

System validation

- 1. Production meter
 - 1.1 Follow the prompts to set up the production meter wizard.
 - 1.2 For the expert mode, tap "ENABLE PRODUCTION METER".

Enable	Product	tion Me	ter	×	÷	Set Up Production Meter
Connected to E	NVOY_065066.	Don't move yo	ur device away f	rom IQ Gateway.	Connect	ted to ENVOY_083860. Don't move your device away from IQ Gateway.
Current F	ower Pro	duction	View	Live Status		
4.6	4 kW					
L1(A)						
1.62 kW	1.62 kVA	6.63 A	244.61 Vrms	1.00 PF		\checkmark
L2(B)					P	Production Meter is Enabled Successfully.
1.59 kW	1.59 kVA	6.53 A	243.60 Vrms	1.00 PF		
L3(C)						
1.42 kW	1.45 kVA	5.92 A	244.92 Vrms	0.98 PF		
	nt to enabl			PF		
			ON METER			
		NOT NOW		Ň		CONTINUE >
↑ Systems	Dashbo		% Support	Menu		Please turn ON the PV breakers if you are not enabling consumption meter. ems pashboard support Ment

2. Consumption meter

- 2.1. Follow the prompts to set up the consumption meter wizard.
- 2.2. Select the "Meter Location". Typically, it is "Load with Solar".

Enable	Consum	ption N	Neter	×	Enable (Consumptio	n Meter	>
connected to EN	IVOY_065066. D	ion't move you	ur device away fro	om IQ Gateway.	Connected to ENV	'OY_065066. Don't mo	ve your device away fr	om IQ Gatew
L1(A)								
241.25 W	383.36 VA	1.57 A	243.82 Vrms	0.48 PF				
L2(B)								
1.67 kW	1.76 kVA	7.22 A	243.46 Vrms	0.94 PF		C	2	
L3(C)						Č	9	
166.28 W	350.33 VA	1.44 A	243.38 Vrms	0.47 PF	C	Consumption M		ł
Select Me	eter Locati	on				Succes	stully.	
	with Sola							
O Load	Only							
Do you wa	nt to enable	e Consum	ption Meter?					
	ENABLE CO	ONSUMPT	TION METER					
		NOT NOW				CONTIN	IUE >	
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Systems	Dashbo	ard S	Support	Menu	Systems	Dashboard	Support	Men

Follow the procedure for post commissioning:

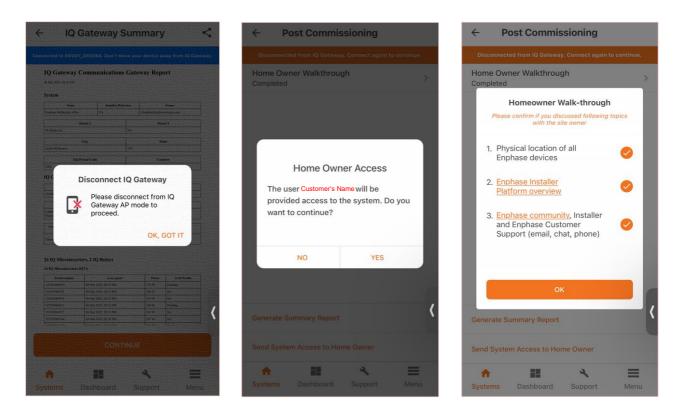
1. Disconnect from the IQ Gateway AP mode and turn on your cellular network connection or connect your smart device to a local Wi-Fi network.

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2. Once the status tab changes to orange, tap "POST COMMISSIONING".



3. Provide access to the homeowner and then follow the prompts.





Revision history

Revision	Date	Description
TEB-00034-2.0	July 2023	Added note to contact Enphase Support if a different grid profile is required.
TEB-00034-1.0	June 2023	Initial release

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