## INSTALLATION MAP

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#### Compliance with EU Directives

This product complies with the following EU Directives and can be used in the European Union without any restrictions.

Electro Magnetic Compatibility (EMC) directive 2014/30/EU

Low Voltage Directive (LVD) 2014/35/EU

Restriction of Hazardous Substances (RoHS) 2011/65/EU

The full text of the EU declaration of conformity (DoC) is available at the following internet address https://enphase.com/en-au/installers/resources/ documentation.

#### Manufacturer:

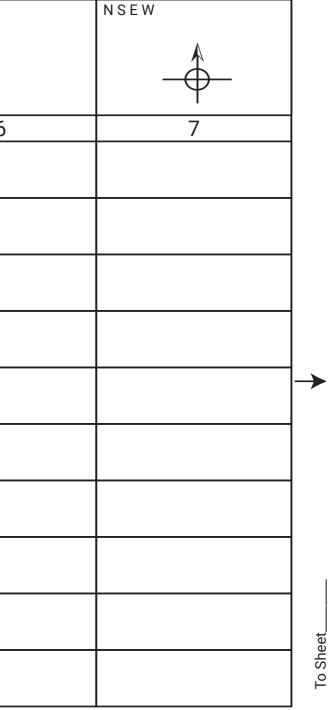
Enphase Energy Inc., 47281 Bayside Pkwy., Fremont, CA, 94538, The United States of America, PH: +1 (707) 763-4784

**Importer Europe:** 

Enphase Energy NL B.V., Het Zuiderkruis 65, 5215MV, 's-Hertogenbosch, The Netherlands, PH: +31 73 3035859

Importer Australia: Enphase Energy Aust. Pty/Ltd., 88 Market St., South Melbourne VIC 3205. PH : +61 3 86691679





# INSTALLATION MAP



# Install IQ8 Series Microinverters with integrated MC4 connectors

To install IQ8 Series Microinverters, read and follow all warnings and instructions in this guide and in the IQ8 Series Microinverters Installation and Operation Manual at: https://enphase.com/en-au/installers/resources/documentation. Safety warnings are listed at the end of this guide.

**IMPORTANT:** The IQ8 Series Microinverters include both AC and DC connectors integrated into the bulkhead. The AC port connects to IQ Cable or IQ Field Wireable connector. The DC port has been evaluated by TUV for intermateability with Stäubli made MC4 connectors, whose cable coupler models are "PV-KST4/...-UR, PV-KBT4/...-UR, PV-KBT4-EVO2/...-UR, and PV-KST4-EVO2/...-UR". The DC port of the inverter must be mated with Stäubli made MC4 connectors.

The microinverter has a Class II double-insulated rating, which includes ground fault protection (GFP). To support GFP, use only PV modules equipped with DC cables labeled PV wire or PV cable. Refer to local electrical codes and standards for grounding requirements of PV array and racking.

IQ8 Series Microinverters require the IQ Cable. An IQ Gateway is required to monitor performance of the IQ8 Series Microinverters.

NOTE: 1) After you log in to your Enphase Account from Enphase Installer App, scan the microinverter serial numbers (standard 1D bar code) and connect to the IQ Gateway to track the system installation progress. Please ensure you are using the latest version of Enphase Installer App 3.28 (3.28.0 and above). 2) Installer must check the manufacturing date of the products to ensure that the installation date is within one year of the manufactured date of the products. Contact your local distributor to validate the date code.

# PREPARATION

A) Download the Enphase Installer App and open it to log in to your Enphase Installer Portal account. With this app, scan microinverter serial numbers (standard 1D bar code) and connect to the IQ Gateway to track system installation progress. To download, go to https://enphase.com/ installers/apps or scan the below QR code:



Android iOS

B) Refer to the following table and check PV module compatibility at: UK: https://enphase.com/en-gb/installers/microinverters/calculator ANZ: https://enphase.com/en-au/installers/microinverters/calculator You can check the intermateable cable coupler models of Stäubli made MC4 connectors at: https://enphase.com/en-gl/support/staubli-mc4

Model		DC connector	PV module* cell count
	2-M-INT** 2-M-INT*** 2-M-INT	Stäubli MC4	Pair with 54-cell/108-half-cell, 60- cell/120- half-cell, 66-cell/132-half-cell, or 72-cell/144-half-cell

\* IQ8 Series Microinverters are compatible with bi-facial PV modules if the temperature adjusted electrical parameters (maximum power, voltage and current) of the modules, considering the electrical parameters including the Bifacial gain, are within the allowable microinverter input parameters range. In evaluating the amount of Bifacial gain, follow the recommendations of the module manufacturers.

\*\* IQ8MC is not available for ANZ and India. \*\*\* IQ8AC is not available for India.

- C) In addition to the PV modules, racking and Enphase microinverters you will need these Enphase items:
- · An IQ Gateway (model ENV-S-EM-230 or ENV-S-WM-230 or ENV-S-WB-230) is required to monitor solar production and required to propagate a grid profile to the microinverters

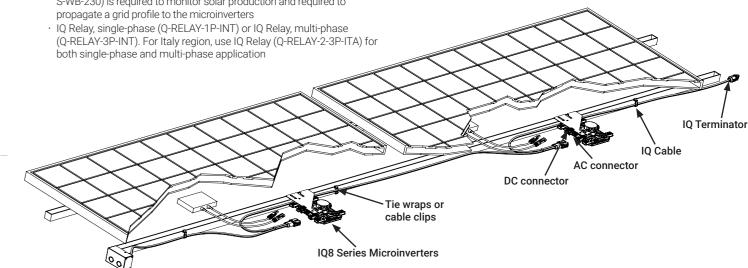
• The mutli-phase IQ Relay also provides phase coupling to allow microinverters on all phases to communicate with the IQ Gateway. Use a Phase Coupler (LPC-01) for multi-phase system for phase coupling if IQ Relay is not installed in the multi-phase system. NOTE: In Germany only, for PV systems greater than 30 kVA, an off-the-shelf DIN VDE V 0124-100 compliant central protection relay must be added to the system.

⊖ ENPHASE.

- · IQ RAW cable (single-phase: Q-25-RAW-300), (Multi-phase: Q-25-RAW-3P-300)
- $\cdot\,$  Tie wraps or cable clips (ET-CLIP-100 works with both multi-phase and single-phase cable)
- · IQ Sealing Caps (Q-SEAL-10): for any unused connectors on the IQ Cable
- · IQ Terminator (Q-TERM-R-10 for single-phase or Q-TERM-3P-10 for multi-phase): typically 1 Terminator (End feeding branch circuit) or 2 Terminator (Centre feeding branch circuit) required per branch circuit · IQ Disconnect Tool (Q-DISC-3P-10)
- · IQ Cable for single-phase or multi-phase:

Cable model	Connector spacing*	PV module orientation	Connectors per box	
Single-phase				
Q-25-10-240	1.3 m	Portrait (all)	240	
Q-25-17-240	2.0 m	Landscape (60-cell)	240	
Q-25-20-200 2.3 m		Landscape (72-cell)	200	
Multi-phase				
Q-25-10-3P-200	1.3 m	Portrait (all)	200	
Q-25-17-3P-160 2.0 m		Landscape (60-cell)	160	
Q-25-20-3P-160 2.3 m		Landscape (72-cell)	160	

\* Allows for 30 cm of cable slack.





- D) Check that you have these other items:
- An AC junction box or AC isolator.
- Tools: screwdrivers, wire cutter, voltmeter, torque wrench, sockets, and wrenches for mounting hardware
- Use crimp tool Multi-Contact PV-CZM-18100, -19100, or -22100 for single-phase Field Wireable connector
- Screwdriver blade width 4 mm to 3.2 mm (1/8") (recommended tool to torque the screw on contact carrier and to disconnect multi-phase Field Wireable connector)
- Optional: Field Wireable connectors (Q-CONN-R-10M and Q-CONN-R-10F for single-phase IQ Cable or Q-CONN-3P-10M and Q-CONN-3P-10F for multi-phase IO Cable)
- E) Protect your system with lightning and/or surge suppression devices. It is also important to have insurance that protects against lightning and electrical surges.
- F) Plan your AC branch circuits to meet the following limits for maximum number of microinverters per circuit.

	Maximum* IQ8 Series Microinverters per AC branch circuit					
Breaker	IQ8MC***	IQ8AC****	IQ8HC			
20A Single-phase	11	10	9			
20A Multi-phase	33 (11 per phase)	30 (10 per phase)	27 (9 per phase)			
254 Multi-phacott	20(12  por phase)	36(12  per phase)	26(12  por phase)			

ti-phase\*\* 39 (13 per phase) 36 (12 per phase) 36 (12 per phase) \* Refer to local regulations for OCPD sizing and to define the number of microinverters per branch in your area.

\*\* This breaker option is not available in Europe

\*\*\* IQ8MC is not available for ANZ and India.

\*\*\*\* IO8AC is not available for India

NOTE: Minimum two IQ8 Series Microinverters shall be required in system installed in Australia and New Zealand to meet AS/NZS 4777.2:2020 reauirements.

G) Size the AC conductor to account for voltage rise. Select the correct conductor size based on the distance from the last microinverter in the circuit to the breaker in the electrical panel/AC switch board. Refer to the Voltage Rise Technical Brief **ANZ:** <u>Single-phase</u> and <u>Multi-phase</u> for details.

Best practice: Centre-feed the branch to minimise voltage rise.

# INSTALLATION

## Position the IQ Cable

- A) Plan each cable section to allow connectors on the IQ Cable to align with each PV module. Allow extra length for slack, cable turns, and any obstructions
- B) Mark the approximate centers of each PV module on the PV racking.
- C) Layout the cabling along the installed racking for the AC branch circuit.
- D) Cut each section of cable to meet your planned needs.

WARNING: When transitioning between rows, secure the cable to the rail to prevent cable or connector damage. Do not put the connectors at the microinverter under tension.

# **2** Position the junction box/AC isolator

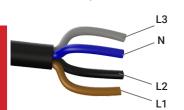
A) Verify that AC voltage at the site is within range:

Microinverter models:	Single-phase service		
	L1 to N	184 to 276 VAC*	
IO8MC-72-M-INT	Multi-phase service		
IQ8AC-72-M-INT IQ8HC-72-M-INT	L1 to L2 to L3	319 to 478 VAC*	
	L1. L2. L3 to N	184 to 276 VAC*	

\* Nominal voltage range can be extended beyond nominal if required by the utility

- B) Install a junction box/AC isolator at a suitable location.
- C) Provide an AC connection from the junction box/AC isolator back to the electricity network connection using equipment and practices as required by local jurisdictions.
- D) For three phase installations, verify the IQ Cable wiring colour codes are correctly terminated: L1-Brown, L2-Black, L3-Grey, N-Blue.





# Mount the microinverters

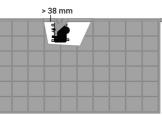
- A) The microinverters can be mounted beneath the modules either horizontal or vertical orientation to the module and must be mandatorily protected from direct exposure to rain, UV, and other harmful weather events. Please refer below image for clearance requirements during vertical mounting.
- B) Mount the microinverter horizontally bracket side up or vertical. Always place it under the PV module, protected from direct exposure to rain, sun, and other harmful weather events. Allow a minimum of 1.9 cm (3/4") between the roof and the microinverter. Also allow 1.3 cm (1/2") between the back of the PV module and the top of the microinverter

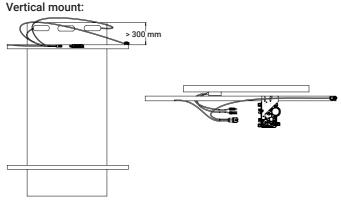
For vertical mount also maintain >300 mm (12") clearance from the edges of the PV module to protect the microinverter from direct exposure to rain, UV, and other harmful weather events.

VARNING: Install the microinverter under the PV module to avoid direct exposure to rain, UV, and other harmful weather events. Do not mount the microinverter upside down.

- C) Torque the mounting fasteners as follows. Do not over torque.
  - 6 mm mounting hardware: 5 N m
  - 8 mm mounting hardware: 9 N m
  - When using mounting hardware, use the manufacturer's recommended torque value

#### Horizontal mount:





# 4 Create an installation map

Create a paper installation map to record microinverter serial numbers and position in the array.

- A) Peel the removable serial number label from each microinverter and affix it to the respective location on the paper installation map.
- B) Peel the label from the IQ Gateway and affix it to the installation map.

Affix serial number labels

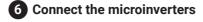
Cable clip

C) Always keep a copy of the installation map for your records.

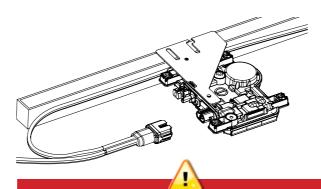
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## **5** Manage the cabling

- A) Use cable clips or tie wraps to attach the cable to the racking. The cable must be supported at least every 30 cm.
- B) Dress any excess cable in loops so that it does not contact the roof. Do not form loops smaller than 12 cm in diameter.



- A) Connect the microinverter. Listen for a click as the connectors engage
- B) Cover any unused connectors on the IQ Cable with Sealing Caps. Listen for a click as the sealing caps engage.



WARNING: Install sealing caps on all unused AC connectors as these connectors become live when the system is energised. ealing caps are required for protection against moisture ingress

To remove a sealing cap or AC connector, you must use an IQ disconnect tool.



### 7 Terminate the unused end of the cable

Single-phase IQ Cable	Multi-phase IQ Cable
A) Remove 13 mm of the cable sheath from the conductors. Use the terminator body loop to measure.	A) Remove 20 mm of the cable sheath from the conductors.
<b>B</b> ) Slide the hex nut onto the cable. The grommet inside the terminator body must remain in place.	<b>B</b> ) Slide the hex nut onto the cable. The grommet inside the terminator body must remain in place.
<b>C</b> ) Insert the cable into the terminator body so that the two wires land on opposite sides of the internal separator.	<b>C</b> ) Insert the cable into the terminator body so that the four wires land on separate sides of the internal separator.
<b>D</b> ) Insert a screwdriver into the slot on the top of the terminator to hold it in place. Hold the terminator body stationary with the screwdriver and turn only the hex nut to prevent the conductors from twisting out of the separator. Torque the nut to 7.0 N m.	<b>D</b> ) Bend the wires down into the recesses of the terminator body and trim as needed. Place the cap over the terminator body. Insert a screwdriver into the slot on the terminator cap to hold it in place. Rotate the hex nu with your hand or a wrench until the latching mechanism meets the bas Do not over torque.
<b>E</b> ) Attach the terminated cable end to the PV racking with a cable clip or tie wrap so that the cable and terminator do not touch the roof.	E) Attach the terminated cable end to the PV racking with a cable clip or tie wrap so that the cable and terminator do not contact the rock

# 8 Complete installation of the junction box/AC isolator

A) Connect the IO Cable into the junction box/AC isolator.

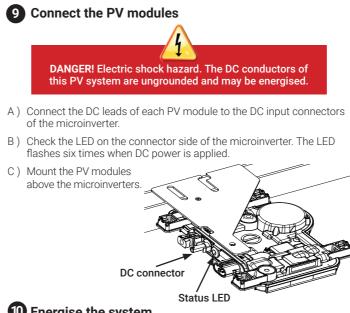
WARNING: To prevent irreversible damage to the system onfirm colour codes at connections before energising the AC Supply. Failure to comply voids the warranty.

B) Note that IQ Cable uses the following wiring colour code:

Single-phase	Multi-phase
Brown – L1 Blue - N	Brown – L1 Black – L2
	Grey – L3
	Blue - N

NOTE: Multi-phase IQ Cable internally rotates L1, L2, and L3 to provide balanced 400 VAC (multi-phase), thus alternating phases between microinverters.

**NOTE**: Minimise the number of unused multi-phase IQ Cable connectors with multi-phase systems. When cable connectors are left unused on a multi-phase system, it creates a phase imbalance on the branch circuit. If multiple cable connectors are skipped over multiple branch circuits, the imbalance can multiply.



# **10** Energise the system

- A) Turn ON the AC disconnect or circuit breaker for the branch circuit.
- B) Turn ON the main utility-grid AC circuit breaker. Your system will ramp up to full producing power after grid profile propagation and device provisioning is completed. It may take 20-30 minutes for full power production based on number of microinverters in the system.
- C) Check the LED on the connector side of the microinverter:

LED	Indicates
Flashing green	Normal operation. AC grid function is normal and there is communication with the IQ Gateway. IQ8 Sereis Microinverter's LED will be Flashing green only after provisioning
Flashing orange The AC grid is normal but there is no communication wight Gateway.	
Flashing red	The AC grid is either not present or not within specification.
Solid red	There is an active "DC Resistance Low, Power Off" condition. To reset, refer to the <i>IQ Gateway Installation and Operation Manual</i> at: <u>https://enphase.com/en-au/installers/resources/documentation</u> . If problem persists, measure resistance between PV+ to EARTH and then PV- to EARTH on PV module and then inverter. Anything less than ~7 k $\Omega$ will trigger "DC Resistance Low, Power Off" condition. Usually the value is in M $\Omega$ on inverter or PV module. Swap out faulty PV module or microinverter.

# ACTIVATE MONITORING AND SELECT THE GRID PROFILE

After you have installed the microinverters, follow the procedures in the IQ Gateway Quick Install Guide to activate system monitoring, set up grid management functions, and complete the installation.

- · Connect the IQ Gateway, detect devices, and select grid profile
- Connect to Enphase Installer Platform, register the system, and build the virtual array

	сту	Gene	ral safety, continued
IMPO	FETY RTANT SAFETY INSTRUCTIONS THIS INFORMATION. This guide con-	$\wedge$	WARNING: Incorrect phase wiring can cause irreversible damage to the microinverter installation. Check all wiring before energising.
	ortant instructions to follow during installation of C, IQ8AC, and IQ8HC Microinverters.	⚠	WARNING: IQ8 Series Microinverters cannot be mixed together with previous generations of Enphase microinverters (IQ7 Series, IQ6 Series, etc) on the same IQ Gateway.
	WARNING: Hot surface.	$\checkmark$	NOTE: Commissioning of IQ8 Series Microinverters systems requires Installer
	WARNING: Refer to safety instructions.	$\checkmark$	app version 3.28.0 or higher. NOTE: To ensure optimal reliability and
<u>/1</u> [];]	DANGER: Risk of electric shock.	V	to meet warranty requirements, install the Enphase microinverters and IQ Cable according to the instructions in this guide.
	Double-insulated	$\checkmark$	<b>NOTE</b> : Provide support for the IQ Cable at least every 30 cm.
		$\checkmark$	<b>NOTE</b> : Perform all electrical installations in accordance with all applicable local
Safet	y symbols DANGER: Indicates a hazardous situation,		electrical codes and standards. NOTE: The AC and DC connectors on the
	which if not avoided, will result in death or serious injury.		cable are rated as a disconnect only when used with an Enphase microinverter.
$\land$	WARNING: Indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions	$\checkmark$	<b>NOTE</b> : Protection against lightning and re- sulting voltage surge must be in accordance with local electrical codes and standards.
•	Carefully. WARNING: Indicates a situation where	Micro	binverter safety
	failure to follow instructions may result in burn injury.	A	<b>DANGER</b> : Risk of electric shock. Risk of fire. Do not attempt to repair the Enphase
$\checkmark$	<b>NOTE</b> : Indicates information particularly important for optimal system operation.		microinverter, it contains no user-ser- viceable parts. If it fails, contact Enphase customer service to obtain an RMA (return
Gene	ral safety		merchandise authorisation) number and start the replacement process. Tampering
A	<b>DANGER</b> : Risk of electric shock. Do not use Enphase equipment in a manner not		with or opening the Enphase microinverter will void the warranty.
	specified by the manufacturer. Doing so may cause death or injury to persons, or damage to equipment.		DANGER: Risk of fire. The DC conductors of the PV module must be labeled "PV Wire"
A	<b>DANGER</b> : Risk of electric shock. Be aware that installation of this equipment includes risk of		or "PV Cable" when paired with the Enphase microinverter. WARNING: You must match the DC
	electric shock. DANGER: Risk of electric shock. The DC	$\triangle$	operating voltage range of the PV module with the allowable input voltage range of the
<u>_}</u>	conductors of this photovoltaic system are ungrounded and may be energised. DANGER: Risk of electric shock. Always	$\wedge$	Enphase microinverter. WARNING: The maximum open circuit voltage of the PV module must not exceed
	de-energise the AC branch circuit before ser- vicing. Never disconnect the DC connectors under load.		the specified maximum input DC voltage of the Enphase microinverter. Refer to the Enphase compatibility calculator to verify PV module electrical
	DANGER: Risk of electric shock. Risk of fire. Only use electrical system components approved for wet locations. DANGER: Risk of electric shock. Risk of		compatibility with microinverter. Use IQ8 Series Microinverters only with compatible PV modules as per Enphase compatibility calculator. Using electrically incompatible
	fire. Only competent personnel should troubleshoot, install, or replace Enphase microinverters or the IQ Cable and Accessories.		PV module voids Enphase warranty. WARNING: Risk of equipment damage. Install the microinverter under the PV
A	<b>DANGER</b> : Risk of electric shock. Risk of fire. Ensure that all AC and DC wiring is correct and		module to avoid direct exposure to rain, UV, and other harmful weather events. Always install the microinverter bracket side up. Do
	that none of the AC or DC wires are pinched or damaged. Ensure that all AC junction boxes		not mount the microinverter upside down. Do not expose the AC or DC connectors (at the IQ Cable connection, PV module, or
	are properly closed. DANGER: Risk of electric shock. Risk of fra. Da not exceed the maximum number.		the microinverter) to rain or condensation before mating the connectors.
	fire. Do not exceed the maximum number of microinverters in an AC branch circuit as listed in this guide. You must protect each microinverter AC branch circuit with a 20	$\triangle$	WARNING: Risk of equipment damage. The Enphase microinverter is not protected from damage due to moisture trapped in cabling systems. Never mate microinverters to
	A (single-phase and multi-phase) or 25 A (multi-phase) maximum breaker or fuse, as appropriate.		cables that have been left disconnected and exposed to wet conditions. This voids the Enphase warranty.
	<b>DANGER</b> : Risk of electric shock. Risk of fire. Only competent personnel may connect the Enphase microinverter to the utility grid.	$\triangle$	<b>WARNING:</b> Risk of equipment damage. The Enphase microinverter functions only with a standard, compatible PV module with
	<b>DANGER</b> : Risk of electric shock when Solid Red light is flashing from the microinverter's LED.		appropriate fill-factor, voltage, and current ratings. Unsupported devices include smart PV modules, fuel cells, wind or water turbines,
	WARNING: Risk of equipment damage. Enphase male and female connectors must only be mated with the matching male/female connector.		DC generators, and non-Enphase batteries, etc These devices do not behave like standard PV modules, so operation and compliance is not guaranteed. These devices may also damage the Enphase microinverter by exceeding its
$\triangle$	WARNING: Before installing or using the Enphase microinverter, read all instructions and cautionary markings in the technical		electrical rating, making the system potentially unsafe. WARNING: Risk of skin burn. The chassis
	description, on the Enphase microinverter System, and on the photovoltaic (PV) equipment.		of the Enphase microinverter is the heat sink. Under normal operating conditions, the temperature could be 20°C above
$\land$	WARNING: Do not connect Enphase microinverters to the grid or energise the AC circuit(s) until you have completed all of the		ambient, but under extreme conditions the microinverter can reach a temperature of 90°C. To reduce risk of burns, use caution
	installation procedures and have received prior approval from the electrical utility	-	when working with microinverters. NOTE: The Enphase microinverter has
	company/grid operator. <b>WARNING:</b> When the PV array is exposed to light, DC voltage is supplied to the microinverter.		field-adjustable voltage and frequency trip points that may need to be set, depending upon local requirements. Only an authorized installer with the permission and following
	·]		requirements of the local electrical authorities should make adjustments.

ty, continued	IQ Ca	ble safety
VG: Incorrect phase wiring se irreversible damage to the verter installation. Check all wiring		<b>DANGER:</b> Risk of electric shock. Do not install the IQ Cable terminator while power is connected.
energising. VG: IQ8 Series Microinverters cannot d together with previous generations ase microinverters (IQ7 Series, IQ6 etc) on the same IQ Gateway.		<b>DANGER:</b> Risk of electric shock. Risk of fire. When stripping the sheath from the IQ Cable, make sure the conductors are not damaged. If the exposed wires are damaged, the system may not function properly.
Commissioning of IQ8 Series verters systems requires Installer sion 3.28.0 or higher. o ensure optimal reliability and		<b>DANGER:</b> Risk of electric shock. Risk of fire. Do not leave AC connectors on the IQ Cable uncovered for an extended period. You must cover any unused connector with a sealing
warranty requirements, install hase microinverters and IQ Cable ng to the instructions in this guide.	$\wedge$	cap. WARNING: Use the terminator only once. If you open the terminator following installation,
rovide support for the IQ Cable at ery 30 cm. Perform all electrical installations dance with all applicable local		the latching mechanism is destroyed. Do not reuse the terminator. If the latching mechanism is defective, do not use the terminator. Do not circumvent or manipulate the latching mechanism.
al codes and standards. The AC and DC connectors on the e rated as a disconnect only when th an Enphase microinverter.	$\triangle$	WARNING: When installing the IQ Cable, secure any loose cable to minimise tripping hazard
rotection against lightning and re- roltage surge must be in accordance	$\checkmark$	<b>NOTE</b> : When looping the IQ Cable, do not form loops smaller than 12 cm in diameter.
al electrical codes and standards.	$\checkmark$	<b>NOTE</b> : If you need to remove a sealing cap, you must use the IQ Disconnect Tool.
<ul> <li>R: Risk of electric shock. Risk of not attempt to repair the Enphase verter; it contains no user-ser-parts. If it fails, contact Enphase er service to obtain an RMA (return ndise authorisation) number and replacement process. Tampering opening the Enphase microinverter the warranty.</li> <li>R: Risk of fire. The DC conductors of nodule must be labeled "PV Wire" table" when paired with the Enphase verter.</li> <li>NG: You must match the DC gr you fully contact of the PV module allowable input voltage range of the emicroinverter.</li> <li>NG: The maximum open circuit of the PV module nust not exceed cified maximum input DC voltage of hase microinverter.</li> <li>NG: The maximum open circuit of the PV module electrical ibility with microinverter. US [Q8]</li> </ul>		<ul> <li>NOTE: When installing the IQ Cable and accessories, adhere to the following:</li> <li>Do not expose the terminator or cable connections to directed, pressurised liquid (water jets, etc.).</li> <li>Do not expose the terminator or cable connections to continuous immersion.</li> <li>Do not expose the terminator or cable connections to continuous tension (e.g., tension due to pulling or bending the cable near the connection).</li> <li>Use only the connectors and cables provided.</li> <li>Do not allow contamination or debris or moisture in the connectors.</li> <li>Use the terminator and cable connections only when all parts are present and intact.</li> <li>Do not allow the terminator to come into contact with open flame.</li> <li>Fit the terminator using only the prescribed tools and in the prescribed manner.</li> <li>Use the terminator to seal the conductor end of the IQ Cable; no other method is allowed.</li> </ul>
ules as per Enpháse compatibility or. Using electrically incompatible		able safety
ule voids Enphase warranty. <b>VG:</b> Risk of equipment damage. the microinverter under the PV to avoid direct exposure to rain, UV, er harmful weather events. Always a microinverder bracket side up Do	✓ ✓	<b>NOTE</b> : Ensure proper routing of PV module DC cable using the clips to prevent the leads from resting on the roof. Do not wrap excess DC Cable around microinverter.
ne microinverter bracket side up. Do unt the microinverter upside down. expose the AC or DC connectors	$\checkmark$	NOTE: Avoid direct exposure to sunlight.
Q Cable connection, PV module, or roinverter) to rain or condensation nating the connectors.	$\checkmark$	NOTE: Avoid sharp edges on racking.
<b>IG</b> : Risk of equipment damage. The emicroinverter is not protected from due to moisture trapped in cabling	$\checkmark$	<b>NOTE</b> : Avoid cable contacting rough surfaces or moving parts within racking system.
s. Never mate microinverters to hat have been left disconnected and I to wet conditions. This voids the	$\checkmark$	<b>NOTE</b> : Avoid overly tight bending radii. Minimum bend radii for the DC Cable is 8 X Cable Outer Diameter.
e warranty. IG: Risk of equipment damage. The e microinverter functions only with	$\checkmark$	<b>NOTE</b> : Avoid overly tightly sized cable clips for routing.
ird, compatible PV module with ate fill-factor, voltage, and current Jnsupported devices include smart ules, fuel cells, wind or water turbines, rators, and non-Enphase batteries, et- evices do not behave like standard PV s, so operation and compliance is not aed. These devices may also damage nase microinverter by exceeding its I rating, making the system potentially <b>VG</b> : Risk of skin burn. The chassis nphase microinverter is the heat der normal operating conditions, perature could be 20°C above i, but under extreme conditions the verter can reach a temperature of	Any third to install with the EEA (eur the insta	third-party products: -party manufacturer or importer product(s) used or commission Enphase product(s) shall comply applicable EU Directive(s) and requirements in the opean economic area). It is the responsibility of ller to confirm that all such products are labelled and have the required compliant supporting ntation.

A	DANGER: Risk of electric shock. Risk of fire. When stripping the sheath from the IQ Cable, make sure the conductors are not damaged. If the exposed wires are damaged, the system may not function properly.
Δ	<b>DANGER</b> : Risk of electric shock. Risk of fire. Do not leave AC connectors on the IQ Cable uncovered for an extended period. You must cover any unused connector with a sealing cap.
7	WARNING: Use the terminator only once. If you open the terminator following installation, the latching mechanism is destroyed. Do not reuse the terminator. If the latching mechanism is defective, do not use the terminator. Do not circumvent or manipulate the latching mechanism.
7	WARNING: When installing the IQ Cable, secure any loose cable to minimise tripping hazard
/	<b>NOTE</b> : When looping the IQ Cable, do not form loops smaller than 12 cm in diameter.
/	<b>NOTE</b> : If you need to remove a sealing cap, you must use the IQ Disconnect Tool.
/	<ul> <li>NOTE: When installing the IQ Cable and accessories, adhere to the following:</li> <li>Do not expose the terminator or cable connections to directed, pressurised liquid (water jets, etc.).</li> <li>Do not expose the terminator or cable connections to continuous immersion.</li> <li>Do not expose the terminator or cable connections to continuous immersion.</li> <li>Do not expose the terminator or cable connections to continuous immersion.</li> <li>Do not expose the terminator or cable near the connectors.</li> <li>Use only the connectors and cables provided.</li> <li>Do not allow contamination or debris or moisture in the connectors.</li> <li>Use the terminator and cable connections only when all parts are present and intact.</li> <li>Do not allow the terminator to come into contact with open flame.</li> <li>Fit the terminator using only the prescribed tools and in the prescribed manner.</li> <li>Use the terminator to seal the conductor end of the IQ Cable; no other method is allowed.</li> </ul>
Са	ble safety
1	NOTE: Ensure proper routing of PV module DC cable using the clips to prevent the leads from resting on the roof. Do not wrap excess DC Cable around microinverter.
/	NOTE: Avoid direct exposure to sunlight.
/	NOTE: Avoid sharp edges on racking.
/	<b>NOTE</b> : Avoid cable contacting rough surfaces or moving parts within racking system.
/	NOTE: Avoid overly tight bending radii. Minimum bend radii for the DC Cable is 8 X Cable Outer Diameter.

# Revision history

REVISION	DATE	DESCRIPTION
140-00251-05	June 2023	Initial release

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