

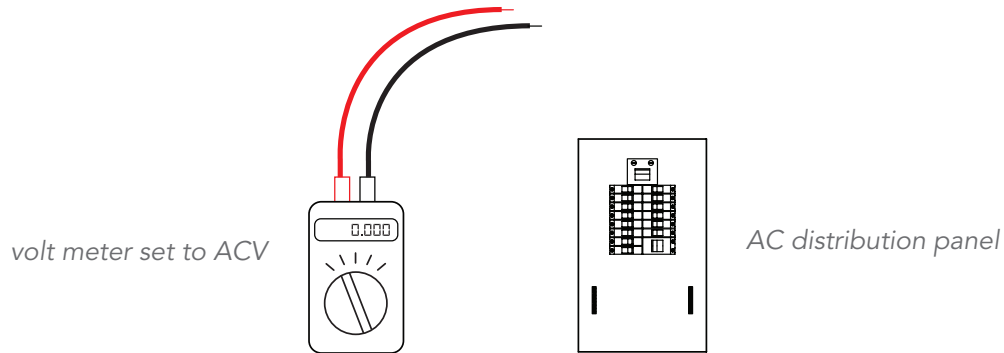


## M215™ Microinverter Quick Install Guide

Read and follow all warnings and instructions in the *M215 Installation and Operation Manual* at: <http://www.enphase.com/support/downloads> before using this document.

1

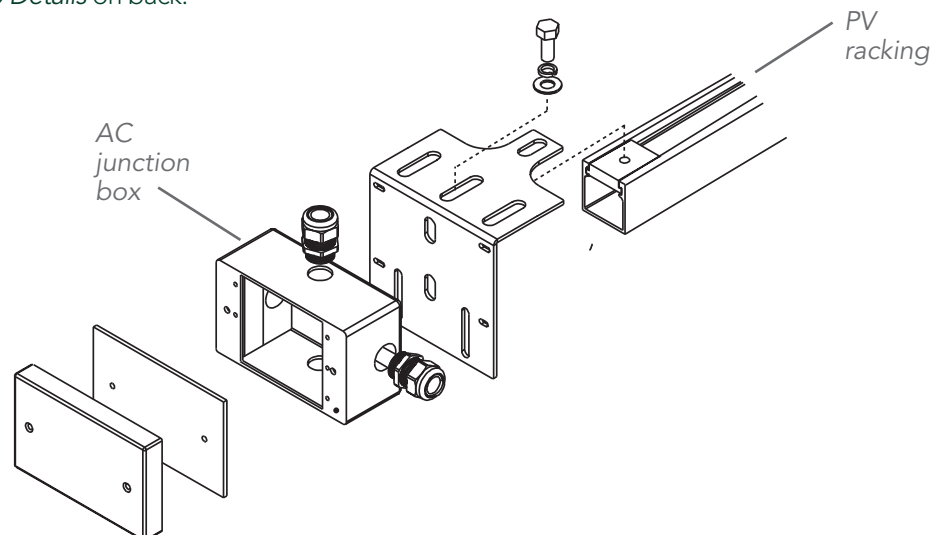
**Measure the AC Voltage of the Service Entrance Conductors**  
Check all phase conductors: line to neutral and line to line.



Acceptable ranges are shown in  
*Step Details* on back.

2

**Install the AC Branch Circuit Junction Box**  
See notes in *Step Details* on back.

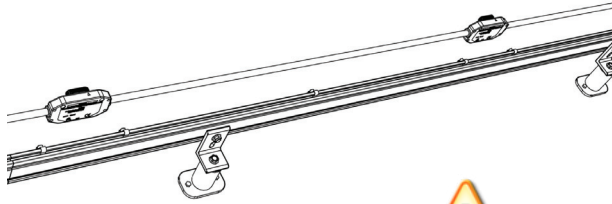


# M215 Microinverter Quick Install Guide

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## Position the Enphase Engage Cable

Lay out the cable along the installed racking.

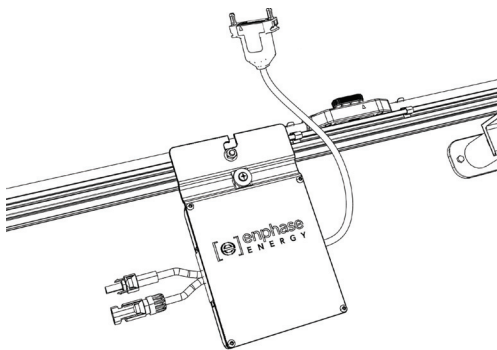


Check the drop connector labels to be sure that you have the right cable. You must use 240 Vac cable for single phase or 208 Vac cable for three-phase.

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## Attach the Microinverters to the PV Racking

a. Mark the approximate centers of each PV module on the PV racking. See notes in *Step Details* on back.

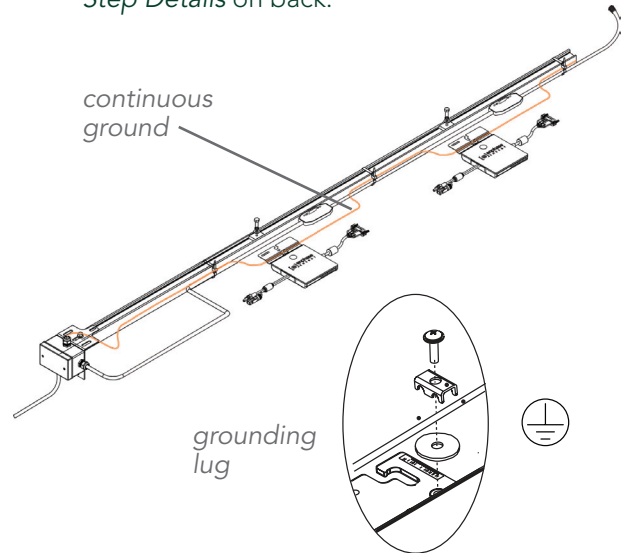


b. Mount the microinverters with the silver side facing up and the black side facing down.

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## Ground the Microinverters

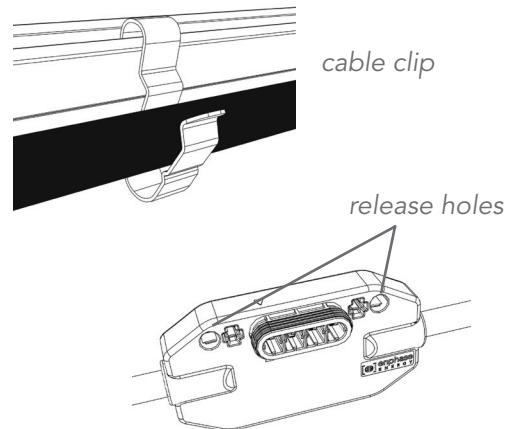
Ground the microinverters using either the grounding lug with a continuous ground wire or WEEB grounding washers. See notes in *Step Details* on back.



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## Dress the Cable

a. Attach the cabling to the rack using the cable clips, or you may use tie wraps.



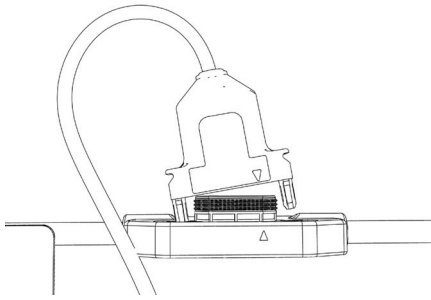
Keep the drop connector release holes clear and accessible.

b. Dress any excess cabling in loops so that it does not contact the roof.

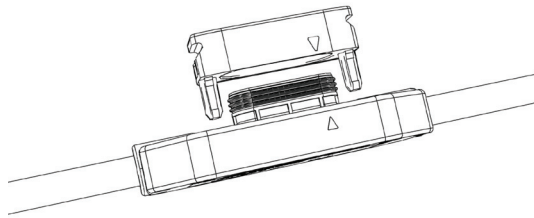
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### Connect the Microinverters

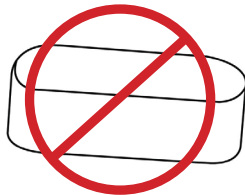
- a. Remove the red temporary shipping cap from the cable connector and connect the micro-inverter. Listen for two clicks as the connectors engage.



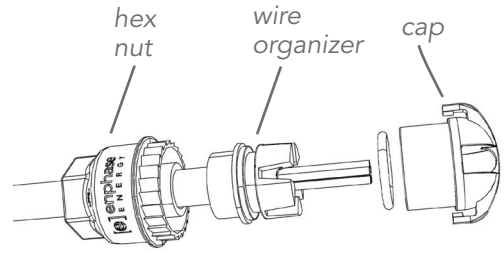
- b. Cover any unused connectors with sealing caps. Listen for two clicks as the connectors engage. See notes in *Step Details* on back.



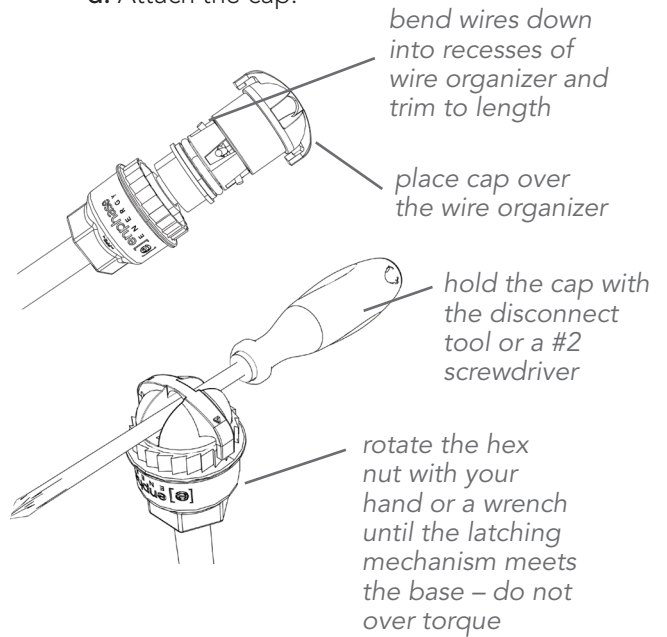
Do not use the red shipping cap to cover unused connectors. The shipping cap does not provide an adequate environmental seal.



- b. Slide the hex nut onto the cable.
- c. Insert the cable end all the way into the wire organizer (up to the stop).



- d. Attach the cap.

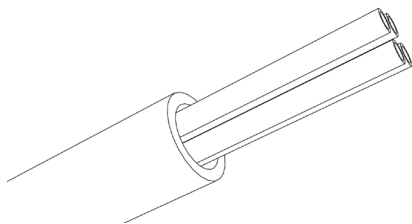


- e. Attach the terminated cable end to the racking with a clip or tie wrap.

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### Terminate the Unused End of the Cable

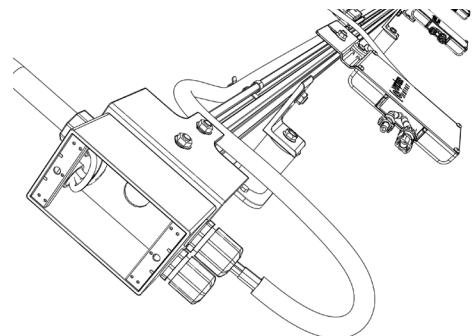
- a. Remove 70mm (3") of the cable sheath from the conductors.



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### Connect the Cable to the AC Junction Box

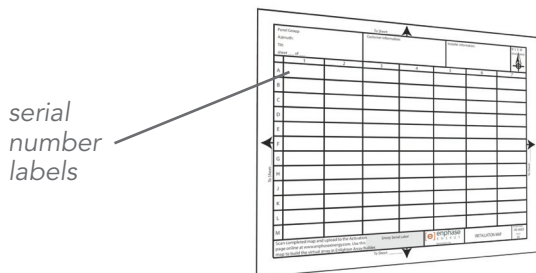
Connect the cable into the AC branch circuit junction box. See notes in *Step Details* on back.



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### Complete the Installation Map

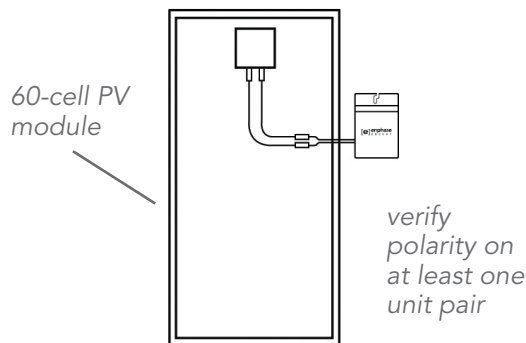
Peel the removable serial number label from each microinverter and affix it to the respective location on the paper copy of the installation map.



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### Connect the PV Modules

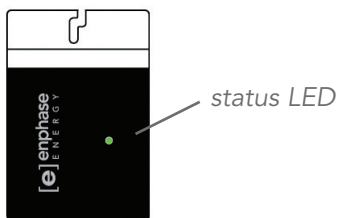
- Mount the PV modules above the microinverters.
- Connect the DC leads of each PV module to the DC input connectors of their corresponding microinverter.



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### Energize the System

- Turn ON the AC disconnect or circuit breaker for the branch circuit.
- Turn ON the main utility-grid AC circuit breaker. Your system will start producing power **after a five-minute wait time**.



The status LED on the underside of each M215 will blink green six times to indicate normal operation one minute after DC power is applied.

## Step Details

1

240 Volt AC Split Phase		208 Volt AC Three Phase	
L1 to L2	211 to 264 Vac	L1 to L2 to L3	183 to 229 Vac
L1, L2, to N	106 to 132 Vac	L1, L2, L3 to N	106 to 132 Vac

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**WARNING:** Only use electrical system components approved for wet locations.

**WARNING:** Do NOT exceed the maximum number of microinverters in an AC branch circuit as listed in the table below. Each branch circuit must be protected by a dedicated circuit breaker of 20A or less.

Service type	Max M215s per branch
240V	17
208V	25

**WARNING:** Size the AC wire gauge to account for voltage drop for both the branch circuit and all upstream conductors leading back to the PCC. See **Voltage Drop Calculations** at <http://www.enphase.com/support/downloads>.

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**WARNING:** Allow a minimum of 1.9 cm (0.75") between the roof and the bottom of the microinverter. Also allow 1.3 cm (0.50") between the back of the PV module and the top of the inverter.

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**NOTE:** The AC output neutral is not bonded to ground inside the microinverter.

**NOTE:** The M215 grounding lug can accommodate a 6-8 AWG conductor.

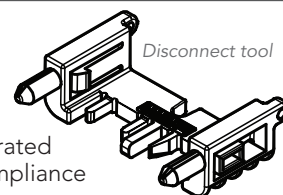
**NOTE:** Torque the microinverter fasteners to the values shown:

- 1/4" mounting hardware – 5 N m (45 in-lbs) minimum
- 5/16" mounting hardware – 9 N m (80 in-lbs) minimum

Using a power screwdriver is not recommended due to the risk of thread galling.

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**WARNING:** Install sealing caps on all unused AC connectors as these become live when the system is energized by the utility. The IP67-rated sealing caps are required for UL compliance and to protect against moisture ingress.



**NOTE:** To remove a sealing cap, you must use the Enphase disconnect tool or a #2 screwdriver.

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**NOTE:** The Engage Cable uses the following wiring scheme.

240 Volt AC, Split Phase Wiring	208 Volt AC, Three Phase Wiring
Black – L1	Black – L1
Red – L2	Red – L2
White – Neutral	Blue – L3
Green – Ground	White – Neutral
	Green – Ground

Refer to the *Enphase Communications Installation Quick Install Guide* for information on Envoy installation and Enlighten set up.

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Enphase Energy Customer Support: [support@enphaseenergy.com](mailto:support@enphaseenergy.com) or 877-797-4743