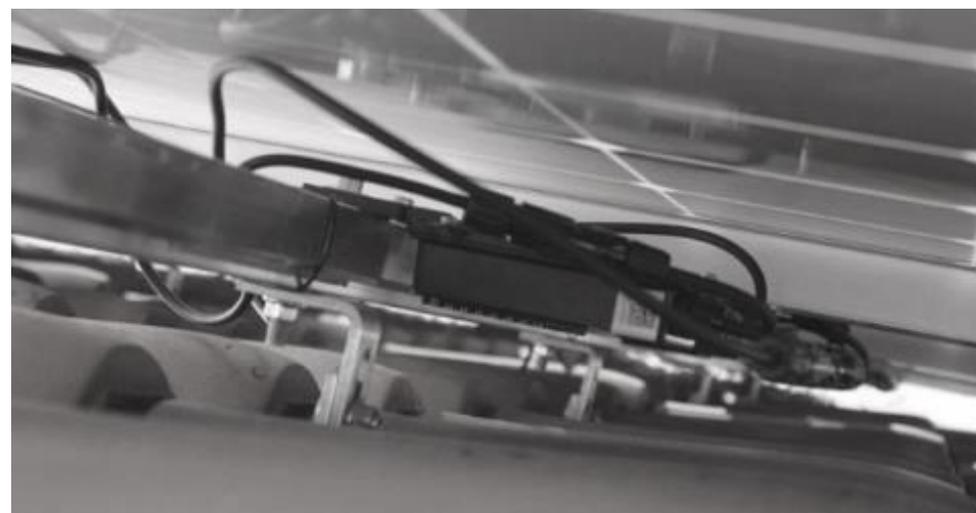
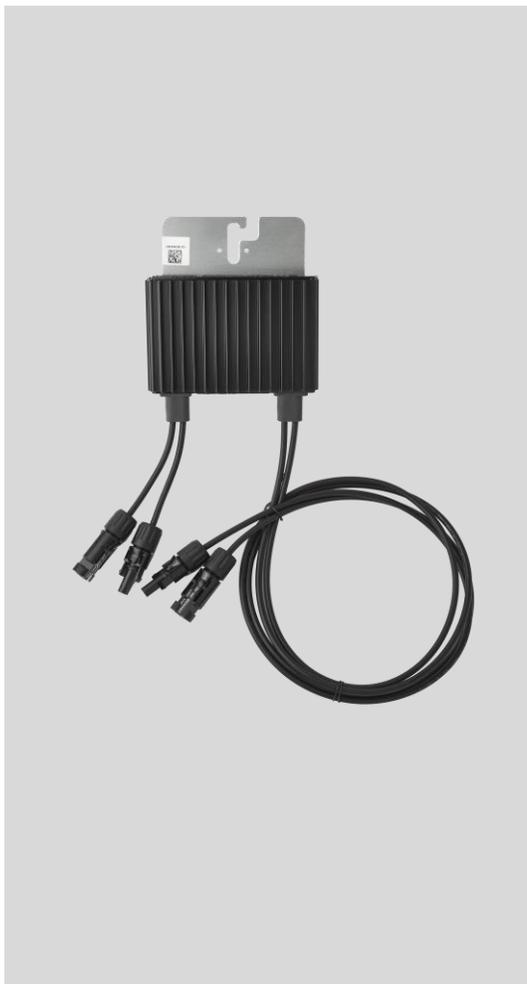




Installation- Installing the Optimizers

12/15/2018

Installing Optimizers



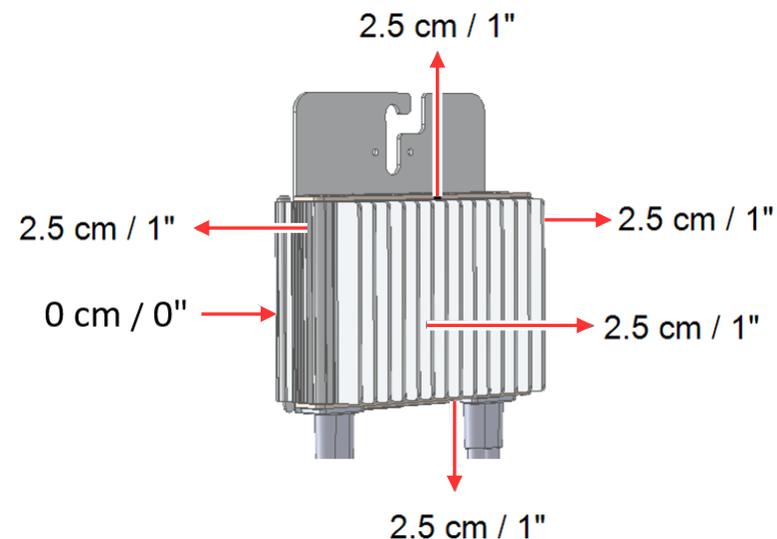
Optimizer Connectors

- ▮ **Identical** connectors are required on the module and the optimizer. SolarEdge offers the following:
 - ▮ MC4 – default, available for all optimizers
 - ▮ T4, Tyco, Amphenol (H4, UTX): available for some models, refer to your distributor



Mounting the Power Optimizers

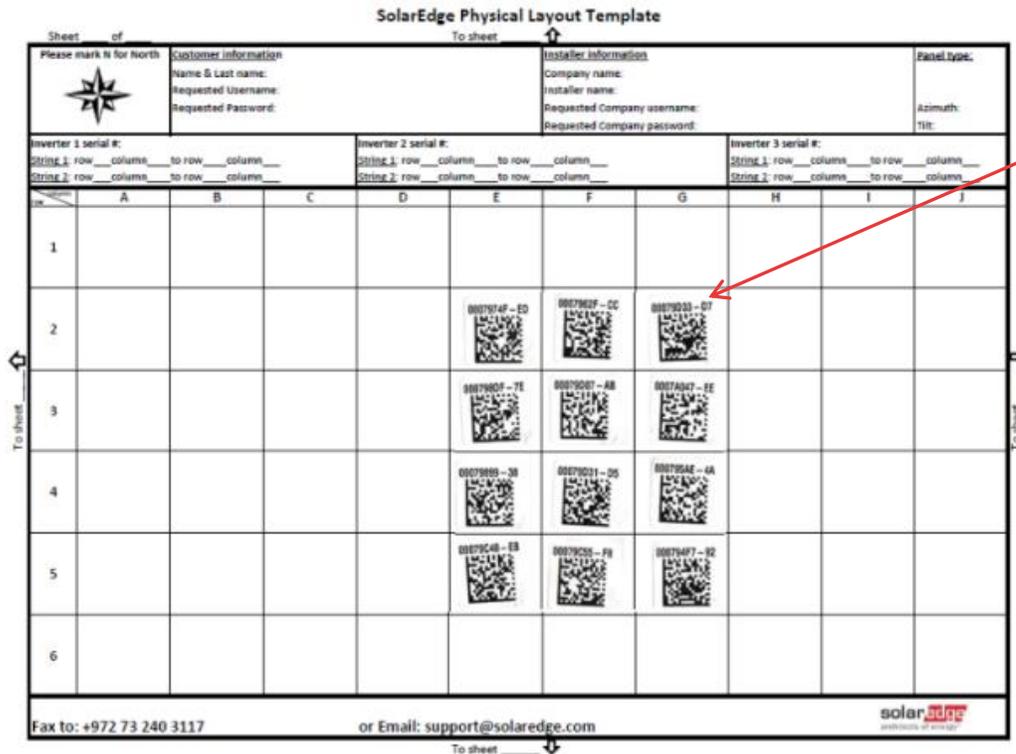
- Determine the mounting location of each power optimizer
 - It is recommended to mount the power optimizer in a location protected from direct sunlight
- The power optimizer can be placed in any orientation (there is no "up"- side)
- To allow for heat dissipation maintain a 1" clearance between the power optimizer and other surfaces, on all sides except the mounting bracket side
- Use M8/M6 screws + washers and verify secure attachment
- The optimizers are double insulated so they do not require grounding



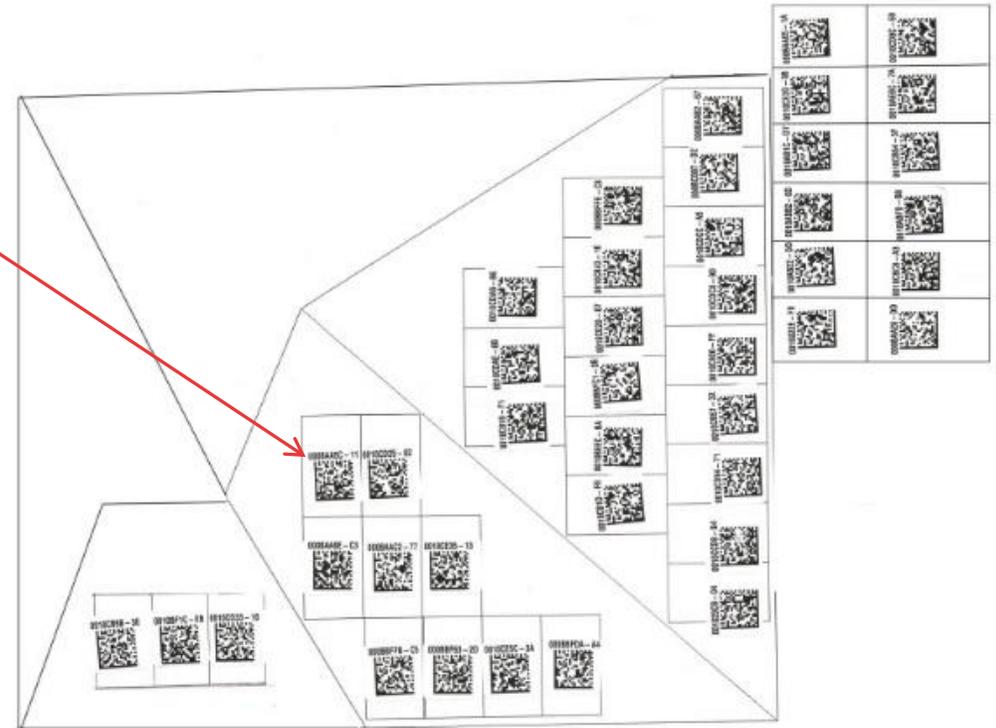
Recording Installation Layout – Stickers

Option 1:

Peel off and place the optimizer's detachable 2D barcode sticker on the SolarEdge template or your own CAD drawing



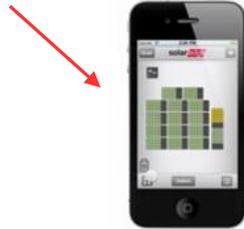
OR



Recording Installation Layout – App

Option 2:

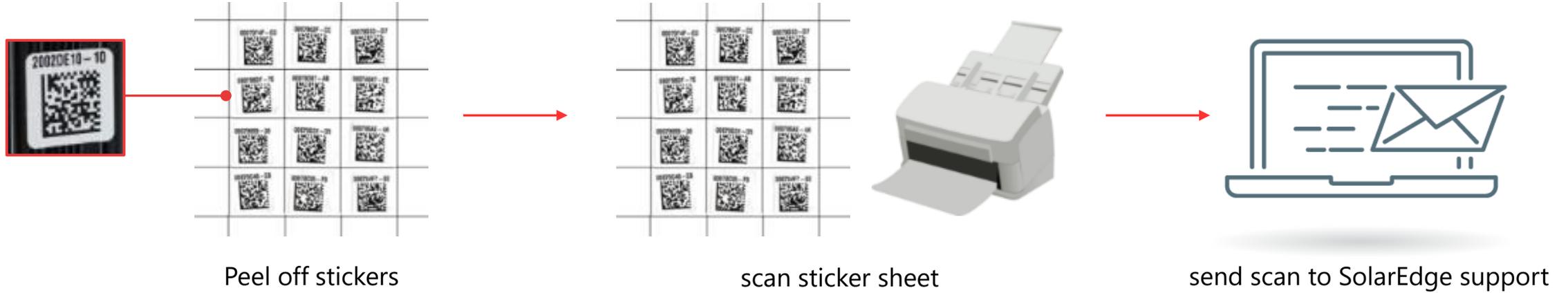
Use the Site Mapper app to create a physical site mapping



- The Site Mapper app is available for free download from the Android and iOS app stores
- Video demonstration and download link available at:
<http://www.solaredge.com/groups/installer-tools/site-mapper>

Site Mapping

Options for site mapping:



Connecting Optimizers in Strings

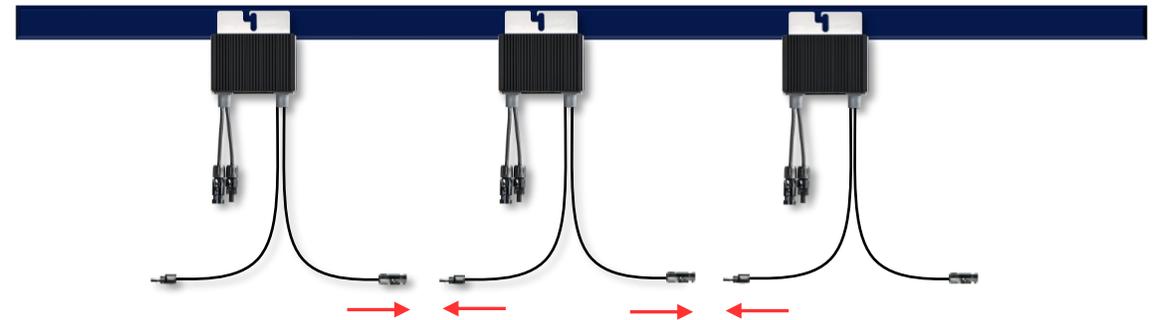
Identify the optimizer inputs and outputs correctly

Short cable = Input from module

Long cable = Output to string



Connect the optimizer output cables in series to form a string

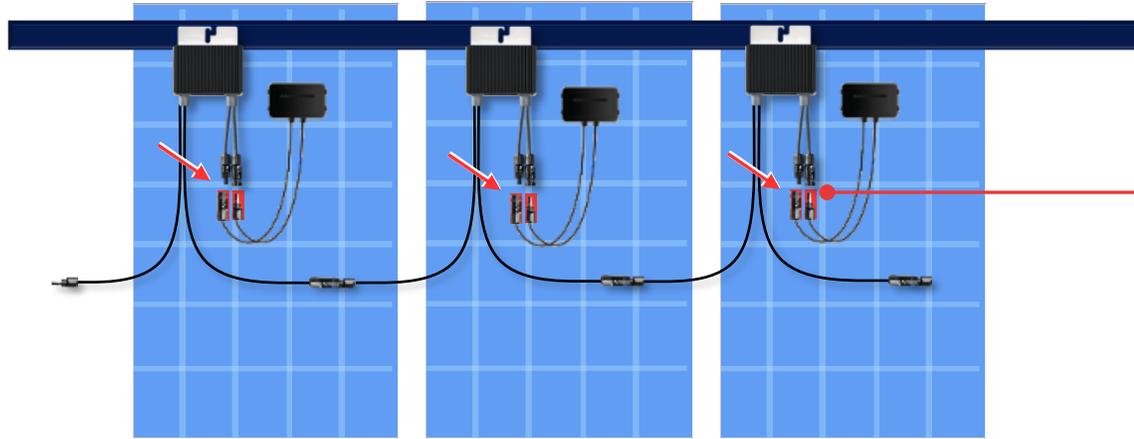


Verify connectors are firmly inserted and locked



Connecting Optimizers to Modules

- Connect each module to the power optimizer input



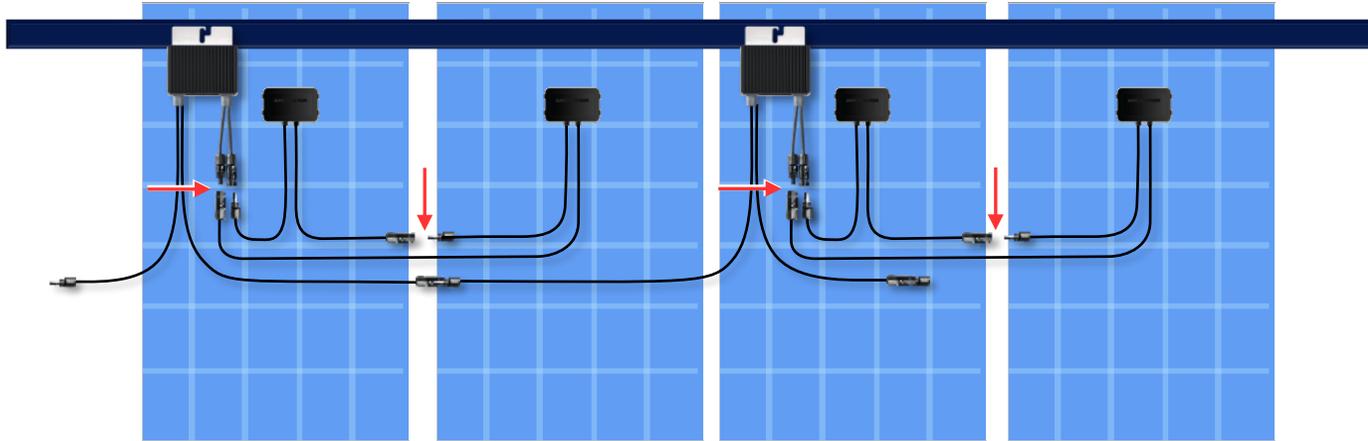
Note!
Extensions between Optimizer
and module are not allowed

- As long as the optimizers are not connected to the inverter or the inverter is OFF, the optimizers will each output a safe 1V with limited current.
- Note: The power optimizers have reverse polarity protection. Even so, when doing your first SolarEdge installation, verify the PV module's polarity with a voltmeter.



Connecting Optimizers to Modules in Series

- Connect 2 modules in series to the power optimizer inputs



- As long as the optimizers are not connected to the inverter or the inverter is OFF, the optimizers will each output a safe 1V with limited current.
- Note: The power optimizers have reverse polarity protection. Even so, when doing your first SolarEdge installation, verify the PV module's polarity with a voltmeter.



Good Practice - Cable Management

Make sure to tie all cables to the mounting rails to avoid loose cables

■ It is recommended to use UV protected cable ties

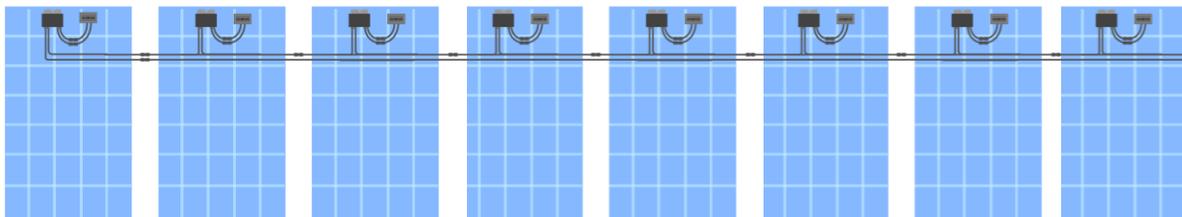


Connecting Optimizers - Verification

- Modules should be exposed to sunlight during verification
- Connect a voltmeter with at least 0.1V measurement accuracy to the string output
 - Each optimizer will output 1V DC
 - Verify each string individually before proceeding
 - Check polarity

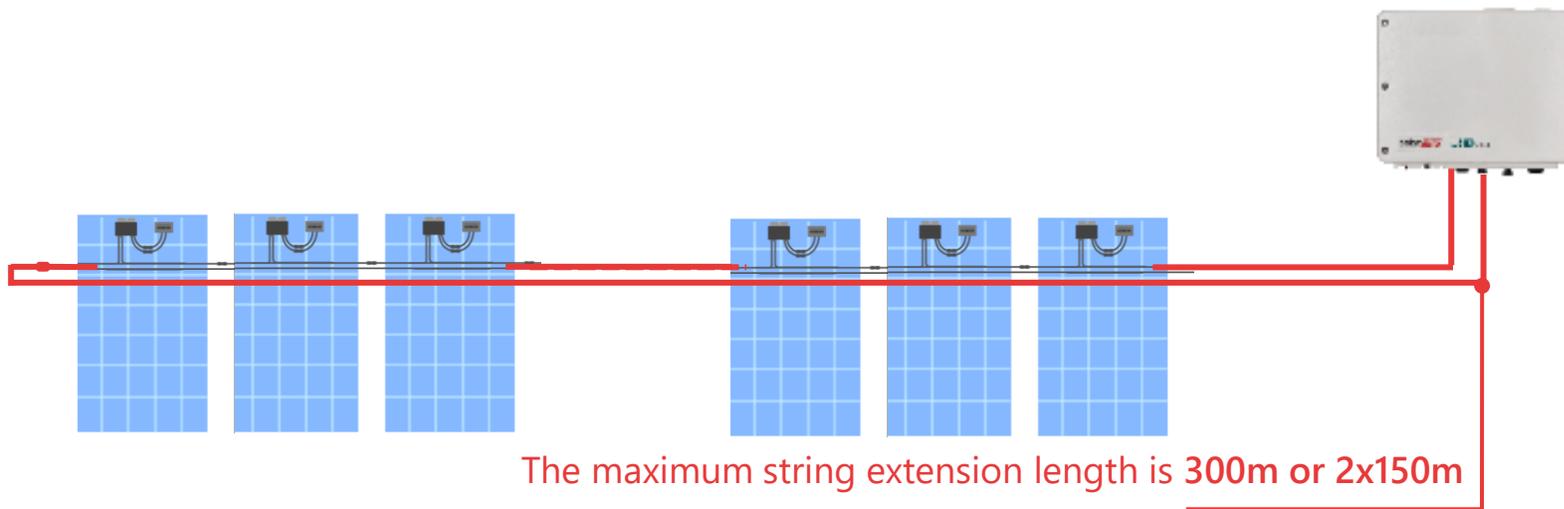
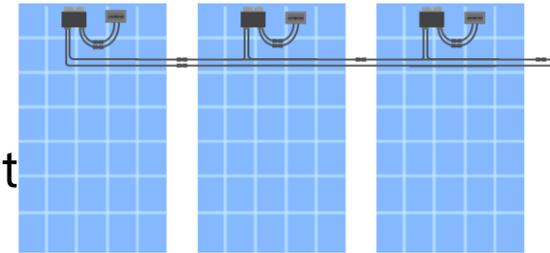
You might see a slight measurement error, but in most cases it will be obvious if you have the correct number of optimizers

8x Optimizer = 8V



Connecting String Extension

- Build extension cables with MC4 connectors to run the string to the inverter location, but don't connect to the inverter, yet.
- Make sure to crimp the connectors on the string extension with correct polarity



The maximum string extension length is 300m or 2x150m

Longer distances require individual approval by SolarEdge

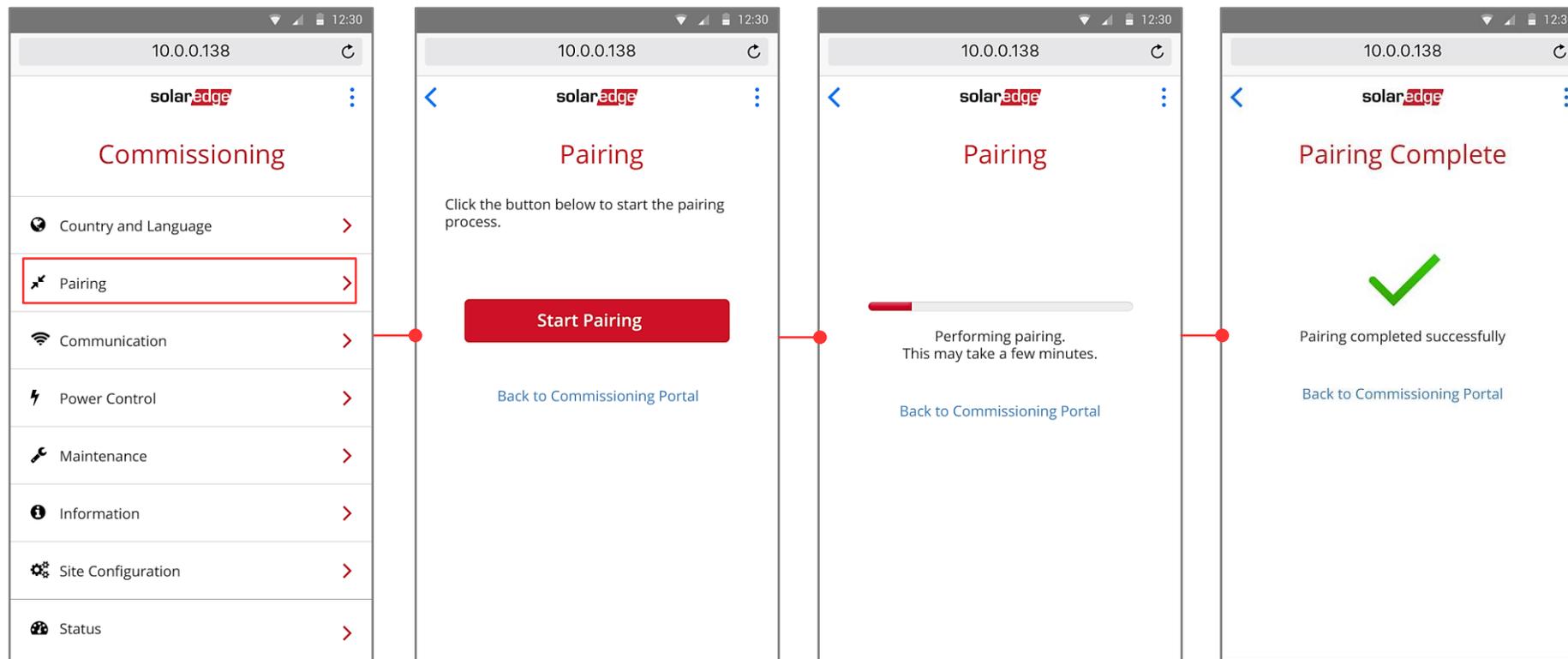
(for SE25K and larger: 700m or 2x350m)



Note: Cutting the optimizer's input or output connectors is prohibited and will void its warranty.

SetApp: Pairing the Optimizers

- Tap **Start Pairing**, the Pairing between the optimizers and the inverter takes several minutes
- When **Pairing Complete** is displayed, return to the commissioning menu to set the communications



Thank You!

Cautionary Note Regarding Market Data & Industry Forecasts

This power point presentation contains market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.

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solar**edge**