

Application Note - Using Extension and Adapter Cables with Power Optimizers

Extension Cables

SolarEdge does not allow using extension cables between a module and a power optimizer, between two modules connected to the same power optimizer, or between two power optimizers, other than in cases specified below:

Between a power optimizer and a module:

- Power optimizers with the 4-type suffix in their part number (Pxxx-4xxxxxx) - extension cables of up to 16 m can be installed per power optimizer (8 m for DC+ and 8 m for DC-).
- Power optimizers manufactured starting from working week 42, 2019, as indicated in the serial number (Example: S/N SJ5019A-xxxxxxx - working week 50, 2019) - extension cables of up to 16 m can be installed per power optimizer (8 m for DC+ and 8 m for DC-).
- Systems with the Single phase inverter with Compact technology and a M2640 optimizer - extension cables of up to 20 m can be installed (10 m for DC+ and 10 m for DC-).

Between two power optimizers or between a power optimizer and the inverter:

- Extension cables can be installed between power optimizers only from row to row, around obstacles or pathways within a row, and from the end of the string to the inverter, as long as the total cable length is not exceeded.

Total cable length - the length of home-run cables from the first and last power optimizer to the inverter - may not exceed the following limitations:

Single Phase Inverters	Three Phase Inverters
All - 1000 ft. /300 m	SE17K and below - 1000 ft. /300 m Above SE17K - 2300 ft. /700 m

Adapter Cables

Adapter cables may be used in combination with SolarEdge power optimizers. However, we suggest observing the following recommendations:

- The adapter cable should be prepared by a reliable manufacturer/installer, using suitable tools according to the connector and cable assembly instructions.
- The maximum adapter cable length (including the connectors) should not exceed 30 cm.
- The adapter cable should meet all required regulatory and safety standards.