Application Note

Crimp DC Connectors to the SolarEdge 48V Home Battery

Version 1.0

July 2025

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Revision history

Version	Date	Description
1.1	July 2025	Updated the inner and outer diameter of the specified cable
1.0	February 2024	Initial release date.

Overview

This application note explains how to correctly crimp DC connectors to the SolarEdge 48V Home Battery. SolarEdge provides standard-length cables. When different cable lengths are needed, you can crimp the DC connectors to the cables. This allows you to accommodate the distance between the systems with varying cable lengths.

Before you begin

- Follow the detailed instructions below to accommodate additional connectors or cables.
- Use only the approved connectors provided by SolarEdge in the following accessory kits:
  - IAC-RBAT- 5KCNCT-01
  - IAC-RBAT- 5KCNCT-02
- Use only the recommended DC cables as described in Approved cables.
- Make sure that the cable's length does not exceed the following:
  - Battery to Inverter – 5 meters
  - Tower to Tower – 3 meters

Required equipment

- Wire stripper
- Cable specifications:
  - 35 mm^2double isolation, 600V
  - Minimum outer diameter is 12mm
  - Maximum outer diameter is 14mm
- Manual/electrical/hydraulic crimping tool
- Manual hydraulic clamp

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- Wrench with 2.5Nm torque

Included components

SolarEdge supplies the following:

- Connector VP—ES-EP25ARAB
- Terminal OL3-8 Copper tin plated
- Terminal MCM-MC-08968

Approved cables

Adjustable length cables

Part number	Description
IAC-RBAT-5KCINV-01	Accessory - Cable set, SolarEdge Home Battery - 48V to Hub Inverter - Three Phase. Max length is 5 meters
IAC-RBAT-5KCINV-02	Accessory - Cable set, SolarEdge Home Battery - 48V to Wave Inverter - Three Phase. Max length is 5 meters
IAC-RBAT-5KCTOW-01	Accessory - Cable set Tower to Tower, SolarEdge Home Battery, 48V. Max length is 3 meters.

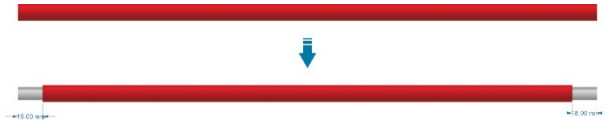
Available SolarEdge connector kits

Part number	Description
IAC-RBAT-5KCNCT-01	Accessory - 10 x Spare connector kit for “Battery to Inverter" connection, SolarEdge Home Battery, 48V
IAC-RBAT-5KCNCT-02	Accessory - 10 x Spare connector kit for “Tower to Tower" connection, SolarEdge Home Battery, 48V

Crimp cables

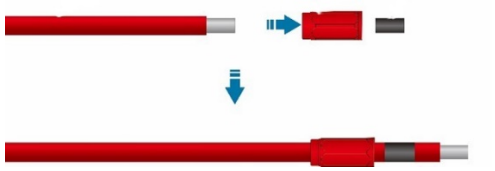
To connect cable to the battery:

1. Strip off 18mm of wire sheath at each end.



Attach the cap and waterproof sleeve to the wire.

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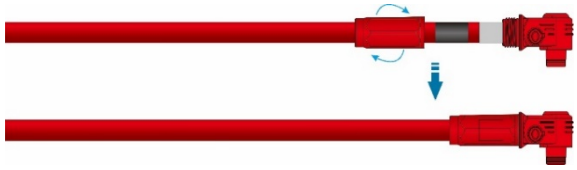
2. Crimp the DC connector at the end of the cable with a manual or hydraulic crimping tool.



NOTE

When using a hydraulic tool, the pressure must be 20t. The flat surface of the terminal must face upward.

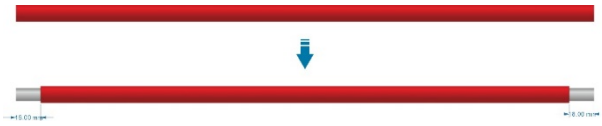
3. Rotate the cap clockwise to fix the connector.



4. Put the terminal head on the tooling and tighten the cap to a torque of 2.5Nm.

To crimp the connector to the DC cables:

1. Strip off 18mm of wire sheath at the end of the cable.



2. Crimp the lug to the end of the cable with a manual or hydraulic crimping tool.



NOTE

When using a manual or hydraulic crimping too, the pressure must be 20t. The crimping is done in one step, and the flat surface of the terminal must face upward.

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