

Installation Guidance

Power and Data cables for BPE PowerDepot batteries

Installing BPE PowerDepot 2.56kWh or 5.12kWh batteries (wall or floor mounted) with the BPE PowerDepot Hybrid Inverter.

Note: this guidance does not apply to the BPE PowerDepot 'all-in-one' system

Power Cables

The BPE PowerDepot Hybrid Inverter has Amphenol (SurLok/Radsok) connection points on the inverter, for the connection of batteries. Alternative brands such as Growatt, Sunsynk etc. have battery terminals inside the inverter cover, these are suitable for standard battery cable lugs (a.k.a. terminal lugs, battery lugs or terminal ends). The BPE PowerDepot Hybrid Inverter does not need to be opened to install Solar PV nor a battery, as all connections are external.



Fig 1: Underside of BPE PowerDepot Hybrid Inverter, with battery leads connected.

To avoid the need for specialist compression crimping tools, and heavy DC cable, Rexel can supply ready-made DC leads to speed up installation.

As the cable between the inverter and battery will be broken through a suitable Battery Isolator (such as the Projoy 125A DC MCB in Enclosure) an installer only requires a compatible Amphenol connector for the inverter end. The battery cables which come with the BPE battery can be used to connect from the battery to the battery isolator (and from battery to battery).

From inverter to battery the sequence is:

Inverter > leads with Amphenol connector at inverter end > cables stripped and connected into the battery isolator > cables (that came with BPE battery) stripped and connected into the battery isolator > cables with terminal lugs connected to the BPE battery.

The following cables each have Amphenol SurLok Plus right-angle connectors on at least one end and are available to order:



Fig 2: Amphenol right-angled SurLok Plus connector

Item	Rexel Code	
ML33RTA Cable pack	7002159	2no. x 2 metre power cables – each with Amphenol at one end, and terminal lugs at the other.
Inverter to Battery long cable pack	7002140	2no. x 2 metre power cables – each with Amphenol at both ends
Battery to Battery short cable pack	7002141	2no. x 500mm power cables – each with Amphenol at both ends

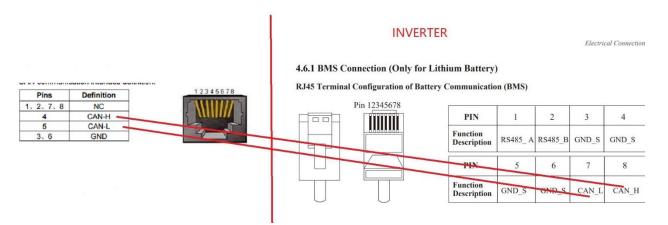
Data (BMS) Cable

To provide Battery Management System (BMS) communication between your inverter and the first battery, an installer needs to make up a basic CAT6 cable. The communication between the inverter and the BPE PowerDepot batteries (2.56kWh and 5.12kWh) uses the CAN bus protocol.

An installer can use the CAT6 data cable which comes with either the BPE PowerDepot inverter or battery, but the RJ45 terminals at each end need to be removed and replaced/reconfigured.

CAT6 cable used for the BMS only uses 2 of the wires/cores for communication. Installers must ensure that the wires in pins 4 and 5 on the battery side, are in pins 8 and 7 (respectively) on the inverter side.

The data cable which come with the batteries can be used to connect battery to battery, without any reconfiguration.



For any clarification or further support, contact BPE on:

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