

Cable size -v- Approx. Current:
 6mm² - 42 Amps
 8.5mm² - 60 Amps
 10mm² - 70 Amps
 16mm² - 110 Amps
 20mm² - 135 Amps
 25mm² - 170 Amps
 40mm² - 300 Amps
 60mm² - 415 Amps

From Engine leisure battery charging solution

Fuse sized as per MPPT installation instructions

Feed from the solar panel(s)

Fuse Block
 If you calculate you will need 6 fuses for your installation. Buy a fuse block with at least 50% more fuses than you think you will need. Most fuse blocks will have a maximum supply rating, make sure you install a main fuse that does not exceed this rating

If you have located the main fuse panel at the front of the vehicle, it may be better to run a second neutral terminal block closer to the rear to reduce the number of cables run. NEVER use the vehicle body or framework as a neutral return path.

Solar Charger
 Is connected to the main Power Bus terminals so that even if the Master Isolation Switch is OFF the battery bank will continue to be charged.

Master Isolation Switch
 The drawing shows a main switch and fuse. However this could be replaced by a Circuit Breaker sized to the maximum supply capacity for the fuse block

Battery Bank Fuse
 The drawing shows a standard hi-capacity fuse, however this could be replaced by a Circuit Breaker

Master Isolation Switch

Main System Fuse

Circuit Breaker raited capacity for Inverter

Main Power Bus Terminals

Accessories Secondary neutral bus

Accessories

Accessories Primary neutral bus

Accessories

Don't use battery clamps as terminal blocks. Corrosion on battery clamps is common, but using them as terminal blocks only makes the problems worse.

Install two Main Power Bus terminal blocks designed to take the maximum amperage you are fused for.

Rough current drawn for inverter...
 300 watt - 25 Amps
 500 watt - 41 Amps
 1000 watt - 84 Amps
 2000 watt - 166 Amps

Locate the inverter as close as possible to the main power bus to reduce losses through cable length

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| Title | Overlander Wiring Diagram - Drawing No 01 |
| Drawn | Simon Barlow |
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