ENERGYSPURT
Sustainable. Energy. Storage.

AlphaESS Install Information

- **July 2025**

Thank you for your interest in Alpha G3 B5. To ensure a seamless onboarding experience while promoting this product, here are some key points to keep in mind:

Installer Code

To complete the final commissioning for all Alpha battery systems, you will require your unique installer code. You can request this code from Energy Spurt either before or after purchase;

Inbuilt-Meter

G3-B5 features a smart meter with built-in capabilities for a 1-phase-2ct connection, with 1 CT dedicated to grid consumption monitoring and 1 CT designated for PV generation monitoring;

3 Phase Site

DTSU 666 needs to be ordered for sites with a 3-phase power supply.
This meter comes with 6 current transformers (CT), where 4 can be utilised for sites with a single-phase inverter, and all 6 can be utilised for sites with a 3-phase inverter;

CT Diameter

The standard size for the in-built meter as well as the DTSU666 meter is 16mm CT.
If your customer's site has a main cable larger than 16mm, you will need to obtain third-party CT clamps before installation. Ensure that the CT diameter matches your site, and please make sure it has a 100A/40A ratio to be compatible with the provided meter;

AC breaker & AC cable size selection

The selection of the breaker and cable size depends heavily on the end-user's backup workload.
Please ensure that the AC cable size is chosen to match the selected breaker accordingly.
For batteries with a 5 kW charging-discharging capacity:

- **0kW < backup load connection ≤ 2.36 kW**, a 32A breaker is recommended;
- **2.36kW < backup load connection ≤ 4.2kW**, a 40A breaker is recommended;
- **4.2 kW < backup load connection ≤ 5 kW**, a 50A or above breaker is recommended;

63A Breaker Specification in Alpha's Installation Manual

In 'MAX forced-charging' mode, both the Grid and PV can charge the battery simultaneously, with a total capacity of 10kW. If the battery is discharging at a 5kW condition, the maximum current could reach 63A.

Installation Manual

Meter and CT configuration are crucial for ensuring the proper functioning of the system.

Please ensure that you read the installation manual as well as the DTSU666 Meter manual thoroughly, as many common questions can be resolved from there;

Common Installation Mistakes

- Incorrect direction of CT clamps;
- The inverter's circuit breaker left off;
- Incorrect cable connection between CTs and the meter;
- Improper positioning of CTs, especially when the Grid Forming function is needed;

It's crucial to pay attention to these details during installation to ensure the system functions correctly and safely;

Changeover Switch

A changeover switch is highly recommended for installation to ensure that your backup loads can be switched back to the grid in case of an inverter/battery fault or when the battery is depleted.

This proactive measure saves both time and money in the long run;

VPP Options

B5 is presently on the VPP approval lists of the following companies: Amber, Nectr, and Energy Australia. Globird, AGL, Origin (and Diamond Energy are under approval).

Many private VPP players prefer to utilise Alpha as their preferred brand because of the FCAS function offered by the Alpha G3 series;

Site Learning

At Energy Spurt, we have a G3-B5 installed in our SA warehouse, serving as a case study.

You're welcome to come and observe the meter connection and CT clamp setup for any installers new to Alpha. If you'd like to book a visit two weeks in advance, we can also arrange a training session with one of Alpha's team members;

Tech Support Booking

If, after reading the installation manual, you still lack confidence for your first installation and wish to avoid possibly waiting on Alpha's support line, you can make a booking in advance with Energy Spurt.

We suggest making the booking at least 5 days before installation. We will attempt to secure a time slot for you with Alpha's team, subject to their availability;

Tech Support and Warranty Claim

If you encounter any quality issues on your site, please don't hesitate to contact us through these channels for assistance:

For tech support and warranty claims, you can reach AlphaEss at +61 02 9000 7676 or via email at <techsupport@alphaess.au>;

Your Account Manager will also be able to assist with any delivery issues and with service and warranty claims.

Warranty Extension Procedure

- Alpha batteries are covered by a 10-year warranty or 6000/8000 cycle life warranty; Alpha inverters come with a 10-year warranty from the installation date;
- To apply for an inverter warranty extension, please email your inverter's serial number, installation date, and billing contact details to <ricky.jiang@alpha-ess.com>;
- Once the request is received, an inverter warranty extension invoice will be shared. Upon payment, Valerie from Alpha will issue the new warranty certificate.