



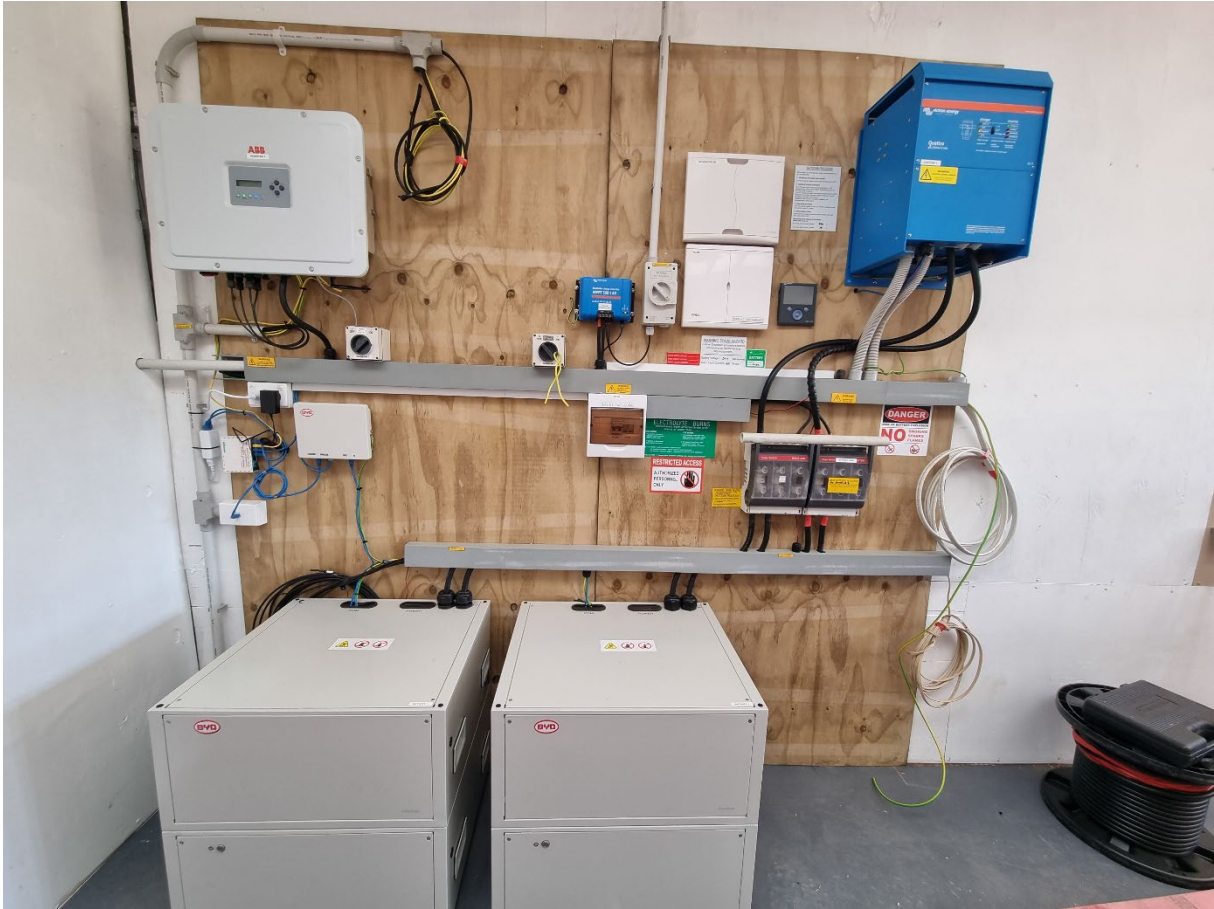
FIMER WILL HELP TO POWER TWO OFF-GRID HOMES IN NEW ZEALAND

Two couples in New Zealand are currently building their homes on a block of land outside of the town, Carterton (85km North of Wellington). During the planning stages, they were quoted over \$100,000 New Zealand Dollars to connect their houses to the electricity grid. Due to the high price of the connection fees, they reached out to Lumina Solar to look at becoming energy self-sufficient.

Lumina, a trusted solar installer in the area with many years of experience completing off-grid systems, calculated and designed their off-grid solution to ensure 30kWh could be supplied to both houses daily.

Stage one of the 9.68kW micro-grid solution includes supply the construction of the first home:

- 1 x ground-mounted solar array with 16 x 440W Jinko solar panels
- 1 x roof-top mounted solar array with 6 x 440W Jinko solar panels
- 1 x FIMER 6 kW UNO-DM-PLUS single-phase string inverter
- 1 x Victron 8kW Quattro inverter
- 1 x Victron MPPT Charge Controller
- 2 x 15.36 kWh BYD LVL batteries
- 1 x 12 kVA Genmac diesel generator with auto-start functionality



Note: This system is now enclosed in a ventilated, lockable room inside the workshop.

Stage two will add additional solar and batteries to the micro-grid solution to support the second home and will include:

- An additional 7kW of ground-mounted panels
- 1 x Fimer 6 kW UNO-DM-PLUS single-phase string inverter
- 1 x Victron 8 kW Quattro Inverter
- 1 or 2 x 15.36 kWh BYD LVL batteries.

FIMER's single-phase UNO-DM-PLUS is available in 2 – 6 kW power ratings and is a reliable solution for homeowners looking for quality, performance and value for money. The inverters are designed and manufactured in Italy and come with a full ten-year replacement warranty for peace of mind.

Callum Skeet, Owner of Lumina Ltd, said of FIMER, "FIMER was selected for this project over another inverter brand as we were confident that FIMER's product would meet the technical requirements of the project and have the capacity to work with the Victron equipment."

FIMER's integrates seamlessly with Victron's technology, if the systems generator kicks in, the UNO-DM inverter will shut-down automatically once it receives the signal from the Victron unit to shutdown, it will then start back up if the generator stops, allowing a seamless energy transition for the home.

FIMER's UNO-DM string inverters have been used in many off-grid projects around Australia and the world, including Antarctica.



The UNO-DM-PLUS also incorporates FIMER's PowerGain MPPT scanning algorithm that allows the inverter to rapidly scan and adapt to shady conditions to ensure it is constantly performing at optimal levels.

The system was installed and commissioned in October 2022. Since then, the system has been producing well and is ready to support the construction of the first home, which began in November.

Callum continued, "The customer has been impressed about how the system is performing so far, but as the homes aren't built yet, they haven't been able to put too much on the load. After commissioning, the team tested the system by charging an electric vehicle which charged quickly, and the system worked perfectly."

Construction of the first home is expected to be completed in late 2023, with the second home in early 2024.

Thinking about your next installation project?

You can count on us with our huge portfolio of solar solutions, integrated digital services, and reliable support network. To find out how FIMER can help you achieve even more with your installations, visit www.fimer.com to find your local sales rep.