RATING METHOD

How we rate inverters

Independent ratings for Australian homes. No brand can pay for a score.

An inverter runs every day for 10 to 15 years, often on a hot wall. We weigh how much solar it keeps, how well it handles split roofs and heat, how much panel it accepts, and how well it's sealed.

71 series on the Clean Energy Council approved list, covering **2,501** approved models. **59** home series have enough published data to rank.

What makes up the score

CRITERION	WEIGHT	WHY IT MATTERS	THE RULE
Efficiency On the list: 96.5% to 98.8%, typically 97.9%	30%	Every point of efficiency is solar you keep, every day for 10+ years.	Maximum efficiency on the datasheet: 96% scores 0, 99% scores 10.
MPPTs for split roofs On the list: 1 to 4, typically 2	20%	Each MPPT runs one roof face independently, so east and west panels don't drag each other down.	Number of MPPT trackers: 1 scores 0, 2 scores 5, 3 or more scores 10.
Heat tolerance On the list: 50°C to 60°C, typically 60°C	20%	Inverters on hot walls throttle or fail early. A higher operating limit means more headroom.	Highest operating temperature: 45°C scores 0, 60°C scores 10.
Room for more panels On the list: 130% to 204%, typically 200%	15%	How much panel capacity the inverter accepts, so you can oversize for winter and cloudy days.	Maximum PV input divided by rated AC output: 1.2x scores 0, 1.5x or more scores 10. Rebate rules allow panels up to 133% of the inverter, so more than 150% adds little.

CRITERION	WEIGHT	WHY IT MATTERS	THE RULE
Weather sealing On the list: IP65 to IP67, typically IP65	15%	Most Australian inverters live outdoors.	IP66 or better scores 10, IP65 9, IP55 4, lower 0.

How we read the documents

Efficiency
The maximum efficiency printed for the series. European weighted efficiency is shown where stated but not scored, because not every maker prints it.

MPPTs
The typical number of trackers across the sizes in the series.

Room for more panels
Maximum PV input divided by rated AC output. Rebate rules allow panels up to 133% of the inverter, so 150% or more scores full marks.

Hybrid or solar-only
Shown as a type you can filter by, not a score. A solar-only inverter isn't a worse product, just a different one.

Before anything is scored

- Currently on the Clean Energy Council approved inverters list
- Manufacturer datasheet on file for the series
- Rated to the Australian grid standard AS/NZS 4777.2

Not in the score

- Whether it takes a battery. Hybrid and solar-only inverters do different jobs, so we show the type and let you filter by it rather than marking solar-only inverters down
- Price and installer workmanship
- Warranty length, which only 2% of the datasheets state (most brands publish it separately)
- App quality and monitoring, which we can't measure from a datasheet
- AC-coupled battery inverters, which do a different job and are listed without a rank

A worked example

GoodWe SDT G3 (GW15K-SDT-AU30 / GW20K-SDT-AU30 / GW25K-SDT-AU30 …), exactly as the site scores it. Points are score × weight.

CRITERION	PUBLISHED VALUE	SCORE	WEIGHT	POINTS
Efficiency	98.7%	9.0	30%	2.70
MPPTs for split roofs	3	10.0	20%	2.00
Heat tolerance	60°C	10.0	20%	2.00
Room for more panels	150%	10.0	15%	1.50
Weather sealing	IP66	10.0	15%	1.50
EnergyUpgrade Score				**9.7**

How brands are rated

A datasheet shows what a product promises, not how a brand behaves. Brand ratings add independent evidence, with the same rules for every brand.

PART	WEIGHT	THE RULE
Product scores	45%	Average datasheet score of the brand's two best home series in the category, the ones an installer would actually quote. Older ranges still on the approved list don't drag a brand down.
Owner reviews	15%	What owners say across the brand's products in this category: SolarQuotes owner reviews for panels, inverters and batteries, and ProductReview.com.au plus SolarQuotes for heat pumps. Reviews are averaged by count, and every brand is pulled towards 4.0 stars as if it had 30 more reviews at that level, so a handful of perfect reviews can't beat thousands of good ones. 3.0 stars or lower scores 0, 5.0 scores 10. Listings for a range the brand no longer sells are shown but not counted, and a listing about the company in general counts half.
Track record	15%	Panels: Kiwa PVEL Top Performer status, 2 points for each of the 2024, 2025 and 2026 scorecards plus up to 4 for total editions (10 or more scores 4). Inverters and batteries: up to 7 points for years selling in Australia (8 or more scores 7) and 3 for a stock-exchange listing. Heat pumps, which should last 10 to 15 years: up to 7 points for years trading in Australia (20 or more scores 7) and 3 for a listing. ACCC recalls of that kind of product take points off: 3 for one covering a range we list, 2 for another, doubled when the brand offers no remedy. A brand in liquidation scores 0.
Installer and market standing	15%	Average of two independent results, each using the better of this year's result and last year's (last year's counts 80%). The SolarQuotes Installers' Choice vote: 1st scores 10, 2nd 8, 3rd 7, 4th or 5th 6. SunWiz awards from Clean Energy Regulator installation data: No. 1 for homes scores 10, No. 1 in another segment or 2nd–3rd 8, top 5 or fastest growing 6. For panels, BloombergNEF Tier 1 status scores 6 when there's no SunWiz award. For heat pumps, which have no installation-data award, the second result is popularity from the number of owner reviews: 10 reviews scores 2, 100 scores 5, 1,000 scores 8.
Australian support	10%	Published Australian office 4 points, local support phone 3, local service email 2, more than one office 1.

Score bands

Excellent	8.5 and above
Very good	7.5 to 8.4
Good	6.5 to 7.4
Fair	Below 6.5

Data confidence

High

Australian datasheet, verified against the approved list, states at least 85% of what we weigh, and every scored value appears in the PDF.

Medium

A global edition of the datasheet, a small gap in the data, or a value we couldn't find printed in the sheet we hold.

Low

The datasheet doesn't clearly match every model in the series, or leaves out more than a third of what we weigh. Low-confidence series can't be a pick.

Questions

Why isn't warranty scored for inverters?

Only about 2% of inverter datasheets print the warranty term; most brands publish it separately. Ask for the warranty letter with your quote.

How are battery inverters treated?

AC-coupled battery inverters do a different job, so they're listed with their datasheet but not ranked against solar inverters.

Why is Tesla Powerwall 3 in the inverter list?

It has a solar inverter built in, so it's rated on the same inverter rules. Its battery side is rated in the battery list.

