



# Solar Solutions



**Residential  
& Commercial**

**Dealer & Installer  
October 2025 Catalogue**



# We're committed to Aotearoa – the land, the people, and our future.

One of the biggest advantages of switching to solar is that it dramatically reduces your impact on the environment. Solar systems generate energy without the aid of fossil fuels, instead harnessing the natural energy provided by the sun. Converting to solar will immediately lower your carbon footprint, cut your power bill, and help your business or home enjoy a more sustainable lifestyle.

We're committed to the future of Aotearoa, and we know solar is essential to this country's path towards sustainability. Our goal is to make converting to solar easy for Kiwis, no matter where they live in NZ. Install a Rheem Solar Solution and join the smart energy revolution.

Rheem is a member of the Sustainable Energy Association of New Zealand, SEANZ.










# Solar Solutions

The solar revolution is underway and Rheem is a solutions. Every Rheem Solar Solution features w panels. Our products are designed to endure Ne each component undergoes rigorous testing to e being added to our product range.

# RHEE

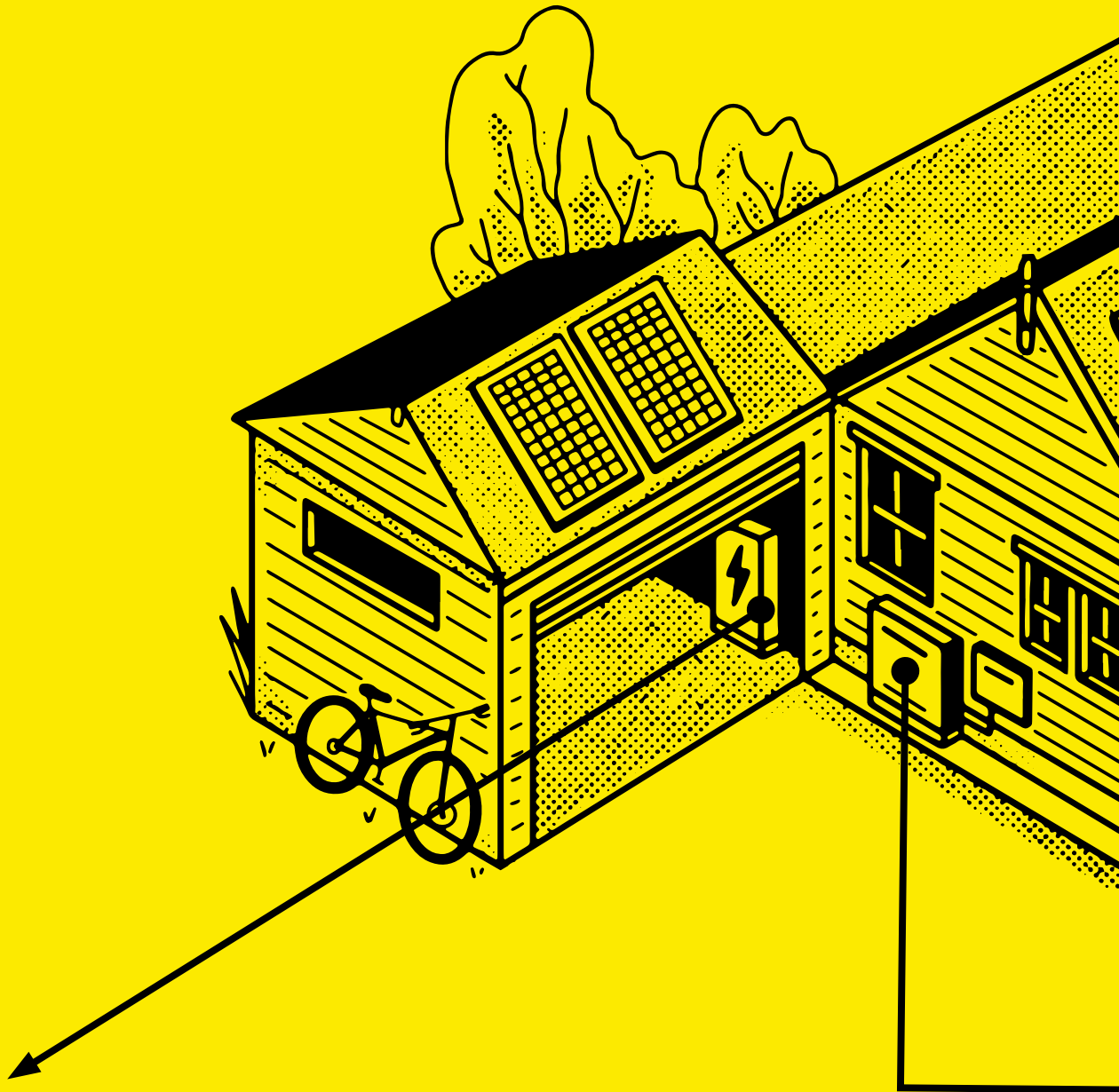


at the forefront with innovative, high-quality  
world-leading inverters and high-efficiency solar  
New Zealand's variable weather conditions and  
ensure it meets our strict quality criteria before

**RHEEM**

# How solar works

Solar power doesn't need to be complicated. From panels to racking, Rheem has everything you need to join the smart energy revolution.



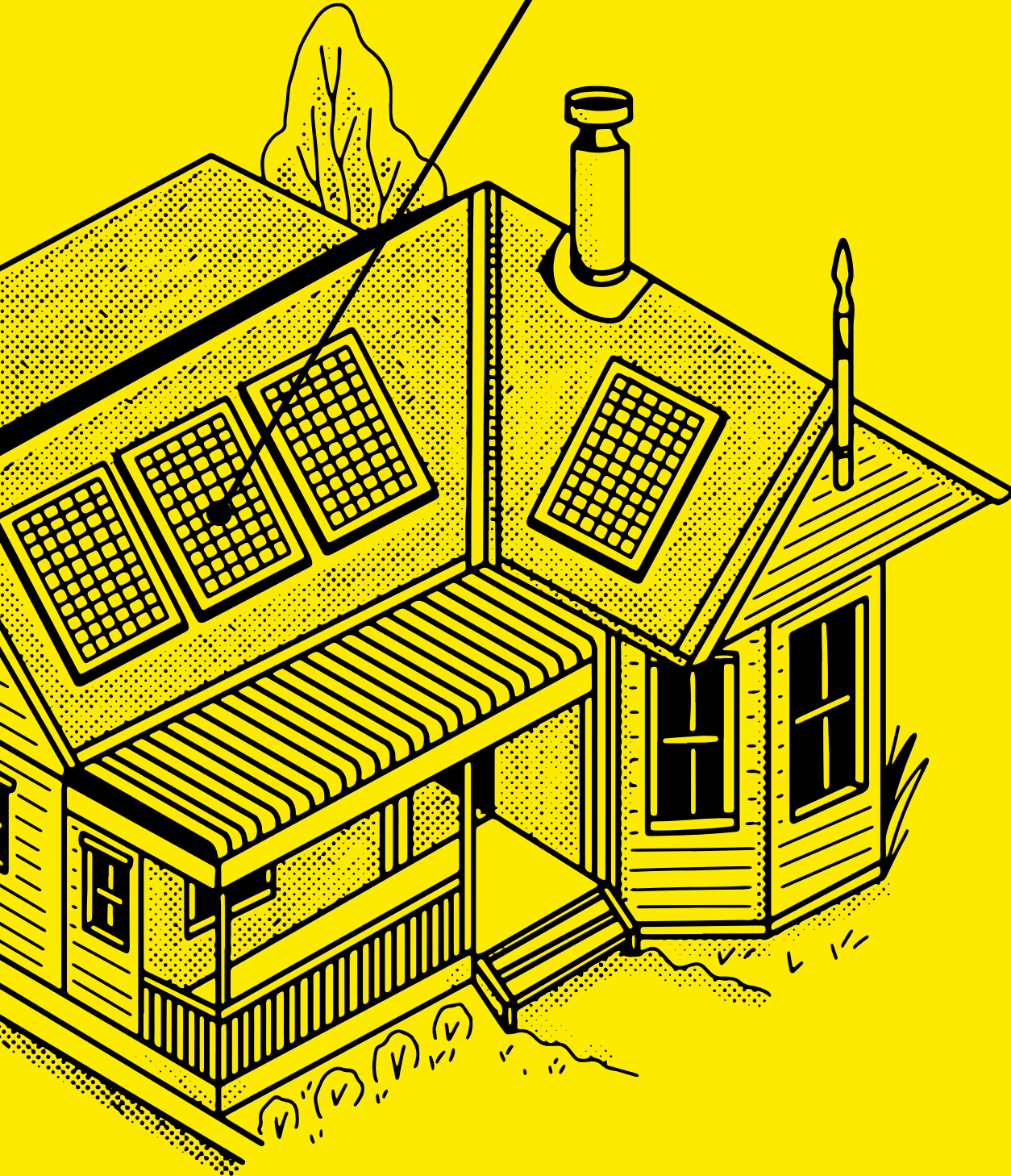
## **BATTERIES & EV CHARGERS**

You're going to need a way to store the power produced by the solar panels, and that's where batteries come in. They charge during the day using electricity generated from solar panels and power your home in the evening when the sun goes down. We've also introduced EV chargers to the Rheem Solar Solutions range to ensure homeowners have all their energy needs covered.



## SOLAR PANELS

It all starts with the panels. These are made up of photovoltaic (PV) cells, which collect light from the sun and convert it into DC current.



## INVERTERS

To make this power produced by the solar panels usable, an inverter is required. In short, an inverter is an electronic device that converts the DC power generated by the solar panels into AC power at the correct voltage for the grid.

# Rheem Solar Solutions

We have a solar solution for every household, business and commercial property. Thanks to our strong network of partners worldwide, we have an extensive range of solar products currently available in NZ. Along with the significant stock we hold in our Auckland and Christchurch warehouses, we also have access to product from both the manufacturer's stock in Australia and the Rheem Australia warehouse stock, which means better lead times on indent product for our customers. Our sales team also operate around the country, so you can be sure that support is never far away.

Alongside our sales support, we provide design tools and assistance via the Rheem Solar Team. We work in partnership with our customers, and our experienced, responsive technical sales team are always keen to assist with solving project challenges. They can help you design systems, prepare system schematics/specifications and provide basic wiring schematics, and will even offer quoted solutions based on a client's power needs and building.

## Rheem Solar Brands

We only partner with quality manufacturers, and all our brands are proven names you can trust. And with quick access to a wide range of local and international products, our industry-leading solar solutions come at a competitive price.







**Our services also adhere to the New Zealand standards for system design and implementation, including:**

- AS/NZ 3000 Wiring Rules
- AS 3008 Selection of Cables
- AS/NZS 4777 Grid Connection of energy systems by inverters
- AS/NZS 5033 Installation of PV Arrays
- AS 4509 Stand-alone power systems\*
- AS 3595 Energy management programs
- AS 1768 Lightning Protection

\* note some aspects of these standards are relevant to grid connect systems

# Solar Panels

Collecting the sun's energy is no easy feat, and it shouldn't come as a surprise that not all solar power panels are equally effective. We only select panels that are proven to be resistant to Potential Induced Degradation (PID) and Light Induced Degradation (LID), with state-of-the-art cell technology for excellent performance under real conditions and anodised frames built to withstand extreme weather conditions. Before we include them in our range, our panels are tested for optimum performance and efficiency using solar panel flash test data and Electroluminescence (EL) imaging.

We have a range of solar panels to suit your needs, including the all-black Solahart Silhouette panel. The Silhouette provides the ideal solution for residential homes thanks to its innovative and premium cell technology. Designed in Germany and built to withstand Australian and New Zealand weather

conditions, these panels have an incredibly low rate of panel degradation. In fact, their output is guaranteed to be at least 86% of the nominal power for up to 25 years, which means you're sure to enjoy energy free from the sun, for years to come.

The high performance Solahart Suncell is another reliable option which offers great value for money. With innovative half-cell technology and excellent power efficiency that results in more energy production per square metre, the SunCell ticks all the boxes on durability.

Astronergy has continuously launched the high-quality ASTRO series solar panels, which can be applied in various application scenarios, such as utility-scale solar farms, commercial & industrial solar projects and residential solar solutions.





## Mechanical Data

Brand	Solahart Silhouette 455 BRB3	Solahart Silhouette 400	Solahart Suncell PLUS 450
Model	Solahart455BRB3	SOLAHART400S4	SOLAHART450C1
Dimensions (H x W x D)	1762mm x 1134mm x 30mm (including frame)	1879 x 1045 x 32mm	2094 x 1038 x 35 mm
Weight	24.5 kg	22.0 kg	23.5 kg
Front Cover	2.0 mm thermally pre-stressed glass with anti-reflection technology	3.2 mm thermally pre-stressed glass with anti-reflection technology	3.2 mm glass thickness
Back Cover	2.0 mm thermally pre-stressed glass with anti-reflection technology	Composite film	White
Frame	Black anodised aluminium	Black anodised aluminium	Silver anodised aluminium
Cell	6 x 16 n-type monocrystalline solar half-cells	6 x 22 monocrystalline solar half-cells	6 x 24 monocrystalline solar half-cells
Junction Box	Protection class IP68, with bypass diodes	Protection class IP67, with bypass diodes	IP 68
Cable	4 mm <sup>2</sup> solar cable; (+) 1200 mm, (-) 1200 mm	4 mm <sup>2</sup> solar cable; (+) 1250 mm, (-) 1250 mm	4 mm <sup>2</sup> solar cable; (+) 1300 mm, (-) 1300 mm
Connector	Stäubli MC4 EVO2A connectors	Stäubli MC4 EVO2 connectors	Stäubli MC4 EVO2 connectors

## Electrical Data

Minimum performance at standard test conditions, STC<sup>1</sup>

Power at MPP - P <sub>MPP</sub>	[W]	455	400	450
Short circuit current - I <sub>sc</sub>	[A]	15.71	11.14	11.37
Open circuit voltage - V <sub>oc</sub>	[V]	36.75	45.30	49.05
Current at MPP - I <sub>MPP</sub>	[A]	14.85	10.77	10.89
Voltage at MPP - V <sub>MPP</sub>	[V]	30.65	37.13	41.32
Efficiency - η	[%]	22.8	20.4	20.7

\* Measurement tolerance +/- 3%

<sup>1</sup> STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Model	Solahart Silhouette	Solahart Silhouette 400	Solahart Suncell
Product Warranty*	30 Years	25 Years	15 Years
Performance Warranty*	30 Years	25 Years	25 Years

### Performance Warranty Information:

At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

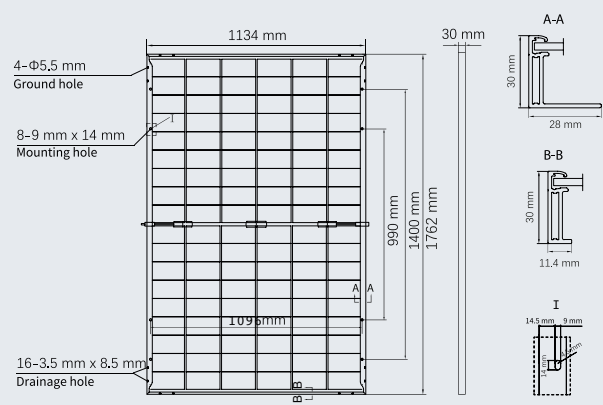
All data within measurement tolerances.

Solahart Product Warranty covers certain defects with the Solahart Silhouette panels. Please refer to the 'Solahart PV Systems Owner's Guide' for full details.

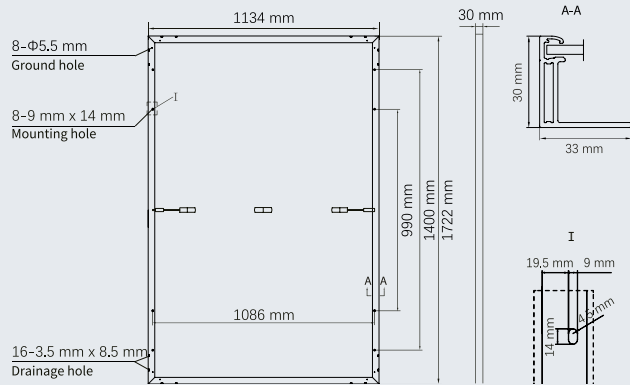
Performance Guarantee is calculated relative to the minimum sorted power.



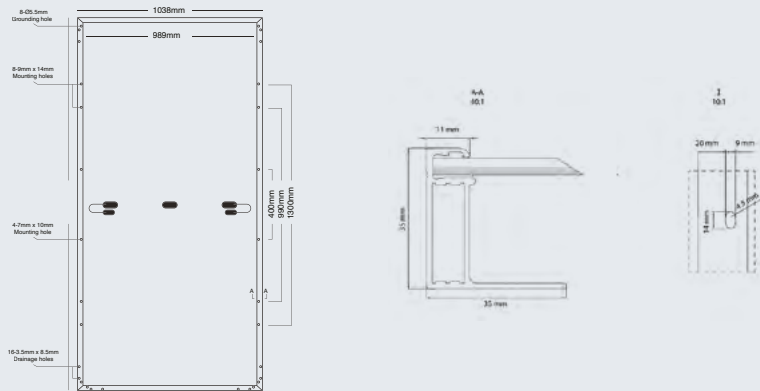
**Solahart Silhouette  
440 BRB2**



**Solahart SunCell  
440R2**



**Solahart SunCell  
450W**



## Mechanical Data

Brand	Astro Bifacial 545	Astro Bifacial 590
Model	Astro CHSM72M(DG)/F-BH 545W	AstroCHSM72N(DG)F-BH590
Dimensions (H x W x D)	2278 x 1134 x 35 mm	2278 x 1134 x 30 mm
Weight	32.6 kg	32.1kg
Front Cover	2.0 mm glass thickness	2.0+2.0 mm glass thickness
Back Cover	Glass	Glass
Frame	Aluminium, silver anodized	Aluminium, silver anodized
Cell	144 (6*24) P type Mono-crystalline	n-type mono-crystalline
Junction Box	IP 68	IP 68
Cable	4 mm <sup>2</sup> / 12 AWG; Portrait: 300 mm; Landscape: 1400 mm	4 mm <sup>2</sup> / 12 AWG; Portrait: ( + )350 mm,( - )250 mm; Customized length
Connector	HCB40 / MC4-EVO2 (optional)	HCB40 / MC4-EVO2 (optional)

## Electrical Data

Minimum performance at standard test conditions, STC<sup>1</sup>

Power at MPP - P <sub>MPP</sub>	[W]	545	590
Short circuit current - I <sub>sc</sub>	[A]	13.75	14.45
Open circuit voltage - V <sub>oc</sub>	[V]	50.10	51.70
Current at MPP - I <sub>MPP</sub>	[A]	12.95	13.58
Voltage at MPP - V <sub>MPP</sub>	[V]	42.1	43.45
Efficiency - n	[%]	21.1	22.8

\* Measurement tolerance +/- 3%

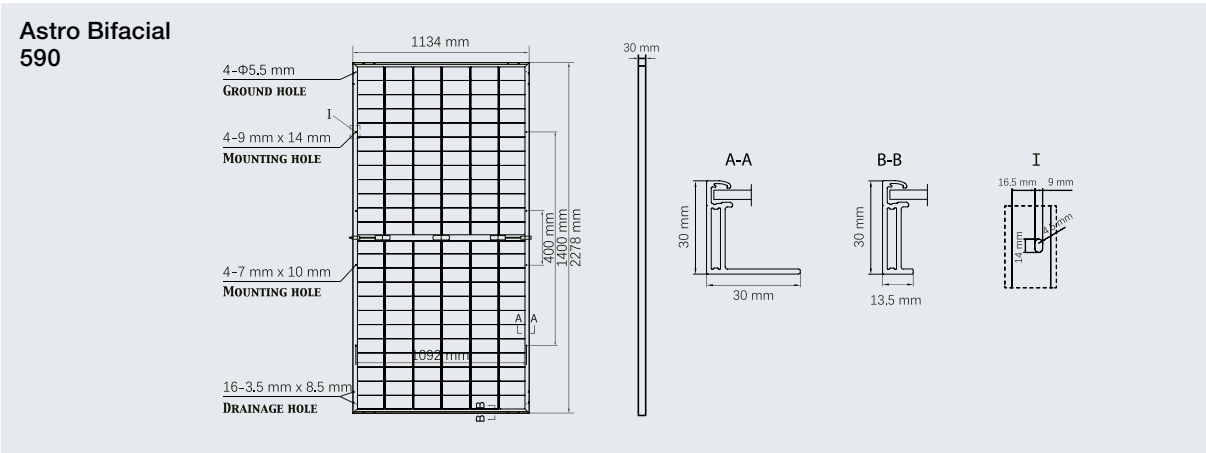
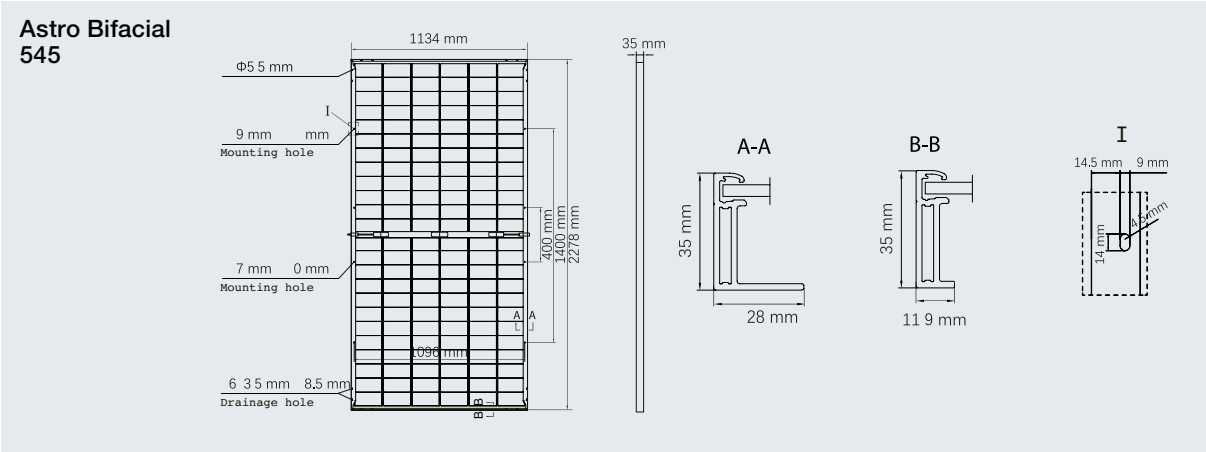
<sup>1</sup> STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25° C, AM=1.5

Model	Astro Bifacial 545	Astro Bifacial 580
Product Warranty*	12 Years	15 Years
Performance Warranty*	30 Years	30 Years

### Performance Warranty Information:

At least 98% of nominal power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal power up to 10 years. At least 86% of nominal power up to 25 years.

All data within measurement tolerances.





# Inverters

Inverters are the 'brains' of your solar power system. Their primary function is to convert the direct current (DC) output into alternating current (AC) – AC is the standard used by all home appliances. And just like solar panels, not all inverters are built the same.

Your inverter needs to provide efficiency and reliability so you can get the most power out of your solar system – which is why Rheem only selects inverter suppliers we can trust. Our range of Enphase, FIMER and GoodWe inverters are world-class products we're proud to stock. They are also the perfect partners for our high-efficiency solar panels and our range of battery storage solutions.



Before releasing new models into our product range, we thoroughly check certifications and performance data from the manufacturer, and we also perform our own field tests to ensure quality and reliability. For that extra piece of mind, all our inverters come with a 10-year warranty.

## Technical Data

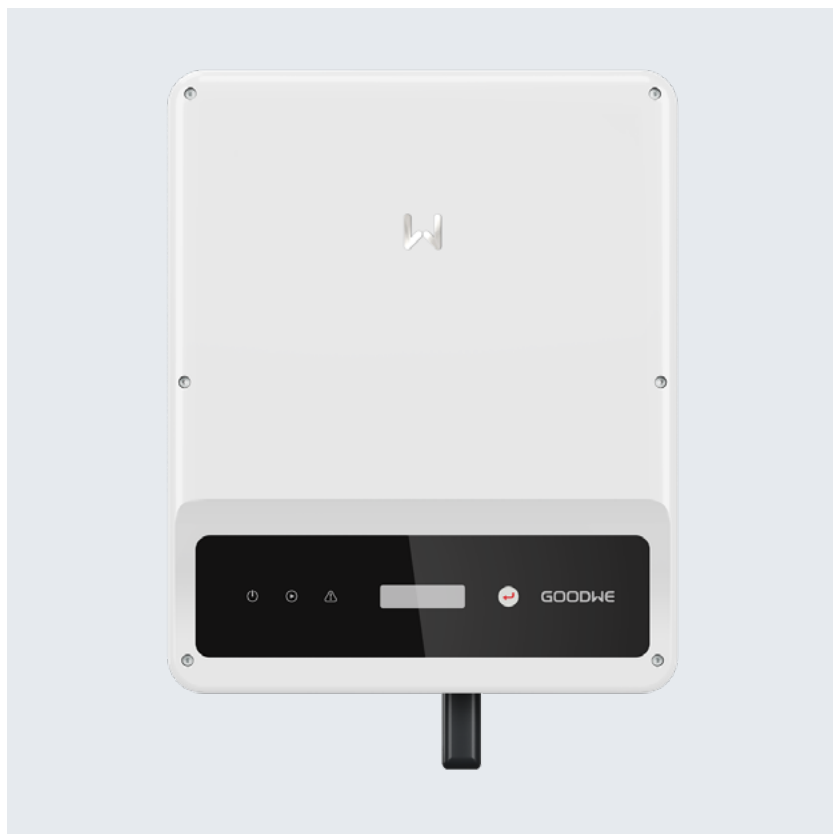
### Microinverters – Enphase



#### IQ8 Series Microinverters

Model	IQ8AC-72-M-INT	IQ8HC-72-M-INT
Max. Input Power (W)	480	505
Min/Max. Input Voltage (Vdc)	18/60	18/60
Min/Max. Output Grid Voltage (V)	184/276	184/276
Maximum Input Current (Adc)	14	14
Max. short-circuit DC input current (A)	25 (Maximum short-circuit current for modules (Isc) allowed being paired with IQ8 Series Microinverters: 20 A (calculated with 1.25 safety factor as per IEC 62548)).	25 (Maximum short-circuit current for modules (Isc) allowed being paired with IQ8 Series Microinverters: 20 A (calculated with 1.25 safety factor as per IEC 62548)).
Nominal Output Grid Voltage (Vac)	230	230
Rated/Maximum Output Current (A)	1.57/1.59	1.65/1.67
Max. Efficiency	97.3%	97.4%
Weight (with mounting plate)	1.1 kg	1.1 kg
Dimension H x W x D (mm)	450 x 370 x 174	540 x 370 x 185

It is a 15 year warranty in Australia and NZ.



## Inverters – Goodwe



### Residential – XS Series 1.5-2.5kW | 1 MPPT | Single Phase

Model	GW1500-XS-11	GW2500-XS-11
Max. Input Power (W) <sup>*1</sup>	1950	3250
Max. Input Voltage (V)	500	600
MPPT Operating Voltage Range (V)	50 ~ 450	50 ~ 550
Start-up Voltage (V)	50	50
Max. Input Current per MPPT (A)	15	15
Max. Short Circuit Current per MPPT (A)	18.75	18.75
Number of MPP trackers	1	1
Number of Strings per MPPT	1	1
Nominal Output Power (W)	1500	2500
Nominal Output Voltage (V)	230	220 / 230
Max. Output Current (A)	7.2	12
Max. Efficiency	97.3%	97.6%
Weight (kg)	5.8	5.8
Dimension H × W × D (mm)	295 × 230 × 113	295 × 230 × 113

\*1: Please visit GoodWe website for the latest certificates



#### Residential – MS Series 10kW | 3 MPPTs | Single Phase

Model	GW10K-MS-30
Max. Input Power (W) <sup>1</sup>	15500
Max. Input Voltage (V)	600
MPPT Operating Voltage Range (V)	40 ~ 560
Start-up Voltage (V)	50
Max. Input Current per MPPT (A)	20
Max. Short Circuit Current per MPPT (A)	25
Number of MPP trackers	3
Number of Strings per MPPT	1
Nominal Output Power (W)	10000
Nominal Output Voltage (V)	220 / 230 / 240
Max. Output Current (A)	43.5*6
Max. Efficiency	97.9%
Weight (kg)	19.0
Dimension H × W × D (mm)	441 × 507 × 210



**Residential – EH Series - 5kW Single Phase - 2 MPPTs - Battery Ready (HV)**

Model	GW5000N-EH
Max. Input Power (W)	7500
Max. Input Voltage (V)	580
MPPT Operating Voltage Range (V)	100 ~ 550
Start-up Voltage (V)	90
Max. Input Current per MPPT (A)	13
Max. Short Circuit Current per MPPT (A)	16
Number of MPP trackers	2
Number of Strings per MPPT	1
Nominal Output Voltage (V)	230 / 220*6
Output Voltage Range (V)	0 ~ 300
Nominal Output Current (A)	21.7
Max. Efficiency	97.6%
Weight (kg)	17.0
Dimension H × W × D (mm)	354 × 433 × 147

**Residential – DNS G3 Series – 3.0-6kW Single Phase – 2 MPPTs**

Model	GW3000-DNS-30	GW5000-DNS-30	GW6000-DNS-30
Max. Input Power (W)	4500	7500	9000
Max. Input Voltage (V)	600	600	600
MPPT Operating Voltage Range (V)	40 ~ 560	40 ~ 560	40 ~ 560
Start-up Voltage (V)	50	50	50
Max. Input Current per MPPT (A)	16	16	16
Max. Short Circuit Current per MPPT (A)	23	23	23
Number of MPP trackers	2	2	2
Number of Strings per MPPT	1	1	1
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Nominal Output Power (W)	3000	5000	6000
Max. Efficiency	97.9%	97.9%	97.9%
Weight (kg)	12.8	12.8	13.4
Dimension H × W × D (mm)	350 × 410 × 143	350 × 410 × 143	350 × 410 × 143
Dimension H × W × D (mm)	354 × 433 × 147		

**Residential – SDT G2 Series 5-20 kW I Three Phase 2 MPPTs**

Model	GW5KDT	GW5000- SDT-20	GW8KAUDT	GW9.9KAUDT	GW15KAUDT	GW20KAUDT
Max. Input Power (W) <sup>1</sup>	7500	7500	12000	15000	22500	30000
Max. Input Voltage (V)	1000	1000	1100	1100	1100	1100
MPPT Operating Voltage Range (V)	180 ~ 850	180 ~ 850	140 ~ 950	140 ~ 950	140 ~ 950	140 ~ 950
Start-up Voltage (V)	160	180	180	180	180	180
Max. Input Current per MPPT (A)	12.5	16	30	30	30	30
Max. Short Circuit Current per MPPT (A)	15.6	20	37.5	37.5	37.5	37.5
Number of MPP trackers	2	2	2	2	2	2
Number of Strings per MPPT	1	1	2	2	2	2
Nominal Output Power (W)	5000	5000	8000	9900	15000	20000
Nominal Output Voltage (V)	400, 3L/NPE	400, 3L/NPE	400, 3L/NPE	400, 3L/NPE	400, 3L/NPE	400, 3L/NPE
Max. Output Current (A)	8.0	8.0	12.8	14.4	24.0	31.9
Max. Efficiency	98.2%	98.2%	98.4%	98.4%	98.4%	98.4%
Weight (kg)	15.0	15.0	20.5	20.5	26.0	26.0
Dimension H × W × D (mm)	354×433×147	354×433×147	415×511×175	415×511×175	415×511×175	415×511×175

**Commercial – SMT Series 25-36kW I 3 MPPTs I Three Phase**

Model	GW25K-MT	GW29.9K-MT	GW36K-MT
Max. Input Power (W) <sup>1</sup>	32500	39000	42900
Max. Input Voltage (V)	1100	1100	1100
MPPT Operating Voltage Range (V)	200 ~ 950	200 ~ 950	200 ~ 950
Start-up Voltage (V)	180	180	180
Max. Input Current per MPPT (A)	30	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5	37.5
Number of MPP trackers	3	3	3
Number of Strings per MPPT	2	2	2
Nominal Output Power (W)	25000	29900	36000
Nominal Output Voltage (V)	400, 3L / N / PE or 3L / PE	400, 3L / N / PE or 3L / PE	400, 3L / N / PE or 3L / PE
Max. Output Current (A)	40.0	43.3	53.3
Max. Efficiency	98.7%	98.8%	98.8%
Weight (kg)	40.0	40.0	40.0
Dimension H × W × D (mm)	480 × 590 × 200	480 × 590 × 200	480 × 590 × 200

**Commercial – MT Series 50-60kW I Three Phase I 4 MPPTs**

Model	GW50KS-MT	GW60KS-MT
Max. Input Power (W) <sup>1</sup>	75000	90000
Max. Input Voltage (V)	1100	1100
MPPT Operating Voltage Range (V)	200 ~ 950	200 ~ 950
Start-up Voltage (V)	180	180
Max. Input Current per MPPT (A)	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5
Number of MPP trackers	5	6
Number of Strings per MPPT	2	2
Nominal Output Power (W)	50000	60000
Nominal Output Voltage (V)	230 / 400, 3L / N / PE or 3L / PE	230 / 400, 3L / N / PE or 3L / PE
Max. Output Current (A)	80.0	96.0
Max. Efficiency	98.6%	98.6%
Weight (kg)	55.0	55.0
Dimension H × W × D (mm)	520 × 660 × 220	520 × 660 × 220

**Commercial – GT Series | 1100Vdc - 100-136kW I Three Phase I Up to 12 MPPTs**

Model	GW100K-HT	GW110K-GT	GW120K-HT	GW136K-HTH
Max. Input Voltage (V)	800	1100	1100	1100
MPPT Operating Voltage Range (V)	180 ~ 800	180 ~ 1000	180 ~ 1000	180 ~ 1000
Start-up Voltage (V)	200	200	200	200
Nominal Input Voltage (V)	370	600	600	600
Max. Input Current per MPPT (A)	42	42	42	42
Max. Short Circuit Current per MPPT (A)	52.5	52.5	52.5	52.5
Number of MPP Trackers	8	8	10	10
Number of Strings per MPPT	2	2	2	2
Nominal Output Power (kW)	75	100	110	125
Nominal Output Apparent Power (kVA)	75	100	110	125
Max. AC Active Power (kW)	75	110	121	137.5
Max. AC Apparent Power (kVA)	75	110	121	137.5
Nominal Output Voltage (V)	127 / 220, 3L / N / PE or 3L / PE	220 / 380, 230 / 400, 3L / N / PE or 3L / PE	220 / 380, 230 / 400, 3L / N / PE or 3L / PE	220 / 380, 230 / 400, 3L / N / PE or 3L / PE
Output Voltage Range (V)	176 ~ 245	304 ~ 460	304 ~ 460	304 ~ 460
Max. Efficiency	98.80%	98.80%	98.80%	98.80%
Max. Output Current (A)*5	196.9	167.1	183.4	199.4
Weight (kg)	88	85	88	88
Dimension (W × H × D mm)	930 × 650 × 300	930 × 650 × 300	930 × 650 × 300	930 × 650 × 300



# Inverters – Goodwe – Energy Storage



## Residential – ES G2 Series 5-6 kW | Single Phase 2 MPPTs | Hybrid Inverter (LV)

Model	GW5000-ES-20	GW6000-ES-20
Max. Input Power (W) <sup>*1</sup>	7500	9000
Max. Input Voltage (V)	600	600
MPPT Operating Voltage Range (V)	60 ~ 550	60 ~ 550
Start-up Voltage (V)	58	58
Max. Input Current per MPPT (A)	16	16
Max. Short Circuit Current per MPPT (A)	23	23
Number of MPP trackers	2	2
Number of Strings per MPPT	1	1
Nominal Output Power (W)		
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240
Max. Output Current (A)	22.7	27.3
Max. Efficiency	97.6%	97.6%
Weight (kg)	21.5	21.5
Dimension H × W × D (mm)	505.9 × 434.9 × 154.8	505.9 × 434.9 × 154.8



## ET Series 15-29.9 kW | 3 MPPTs | Three Phase | Hybrid Inverter (HV)

Model	GW15K-ET	GW20K-ET	GW25K-ET	GW29.9K-ET
Max. Input Power (W) <sup>*1</sup>	22500	30000	37500	45000
Max. Input Voltage (V)	1000	1000	1000	1000
MPPT Operating Voltage Range (V)	200 ~ 850	200 ~ 850	200 ~ 850	200 ~ 850
Start-up Voltage (V)	200	200	200	200
Max. Input Current per MPPT (A)	30	30	30	30
Max. Short Circuit Current per MPPT (A)	38	38	38	38
Number of MPP trackers	2	2	3	3
Number of Strings per MPPT	2 / 2	2 / 2	2 / 2 / 2	2 / 2 / 2
Nominal Output Power (W)	15000	20000	25000	29900
Nominal Output Voltage (V)	380 / 400, 3L / N / PE	380 / 400, 3L / N / PE	380 / 400, 3L / N / PE	380 / 400, 3L / N / PE
Max. Output Current (A)	22.7 (27.3@60s, 36.4@3s)	30.3 (36.4@60s, 48.5@3s)	37.9 (45.5@60s)	45.5 (54.5@60s)
Max. Efficiency	98.0%	98.0%	98.0%	98.0%
Weight (kg)	48	48	54	54
Dimension H × W × D (mm)	520 × 660 × 220	520 × 660 × 220	520 × 660 × 220	520 × 660 × 220

<sup>\*1</sup>: 4600W for VDE0126-1-1&VDE-AR-N 4105 and CEI 0-21.

## Energy Storage – ET G2 Series 5-10kW I Three Phase Hybrid Inverter (HV)

Model	GW6KL-ET	GW8KL-ET	GW9.9KL-ET
Nominal Battery Voltage (V)	500	500	500
Battery Voltage Range (V)	150 ~ 720	150 ~ 720	150 ~ 720
Start-up Voltage (V)	150	150	150
Max. Continuous Charging Current (A)	30	30	40
Max. Continuous Discharging Current (A)	30	30	40
Max. Charging Power (W)	9000	12000	15000
Max. Discharging Power (W)	6600	8800	11000
Max. Input Power (W)	9600	12800	16000
Max. Input Voltage (V)	1000	1000	1000
MPPT Operating Voltage Range (V)	120 ~ 850	120 ~ 850	120 ~ 850
Start-up Voltage (V)	150	150	150
Nominal Input Voltage (V)	620	620	620
Max. Input Current per MPPT (A)	16	16	16
Max. Short Circuit Current per MPPT (A)	24	24	24
Number of MPP Trackers	2	2	3
Number of Strings per MPPT	1	1	1
Nominal Output Power (W)	6000	8000	9990
Max. Apparent Power from Utility Grid (VA)	12000	16000	20000
Nominal Output Voltage (V)	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE	400 / 380, 3L / N / PE
Output Voltage Range (V)	170 ~ 290	170 ~ 290	170 ~ 290
Max. AC Current Output to Utility Grid (A)*5	8.7	11.6	14.5
Max. AC Current From Utility Grid (A)	15.7	21	26.1
Nominal Output Voltage (V)	400 / 380	400 / 380	400 / 380
Max. Efficiency	98.00%	98.00%	98.20%
Weight (kg)	23	23	25
Dimension (W × H × D mm)	496 × 460 × 221	496 × 460 × 221	496 × 460 × 221

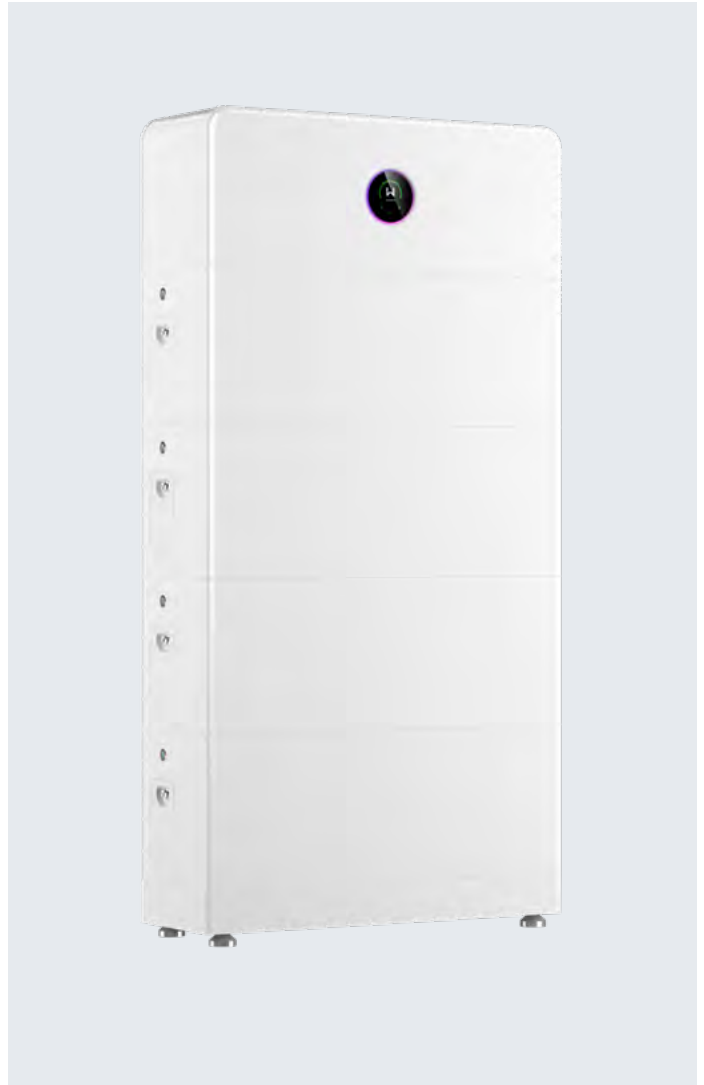
## Residential – SBP G2 Series 5-6kW I Single Phase

Model	GW5000-SBP-20	GW6000-SBP-20
Start-up Voltage (V)	40	40
Nominal Output Power (W)	5000	6000
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240
Max. Output Current (A)	22.7	27.3
Max. Efficiency	95.5%?	95.5%?
Weight (kg)	19.5	19.5
Dimension H × W × D (mm)	505.9 × 434.9 × 154.8	505.9 × 434.9 × 154.8 *AC Coupled battery inverter

\*1 4600W for VDE0126-1-1&VDE-AR-N 4105 and CEI 0-21. \*2 For CEI 0-21 GW5000S-BP is 5100W; for VDE-AR-N4105 GW5000S-BP is 4600W. \*4Can be reached only if PV and battery power is enough. \*5 The actual charge and discharge current also depends on the battery. †For full details see the manufacturer's warranty statement. \*For full details see Solahart Owner's Guide & Installation Instructions

# GoodWe Batteries

## ESA All-In-One Series



The GoodWe ESA Series is a fully integrated all-in-one solar and storage solution that combines inverter and battery in a pre-wired, modular design-making installation significantly faster and easier. Engineered for flexibility, the ESA system allows seamless expansion to meet evolving energy needs, with scalable battery capacity for future upgrades. With its streamlined setup, the ESA Series can reduce installation time by up to 50%, making it an ideal choice for efficient and adaptable residential energy systems. It also supports dynamic tariff optimisation.

# ESA Series – GoodWe



5-10KW/5-48KWH | SINGLE PHASE HOME STORAGE SOLUTION | HIGH VOLTAGE BATTERY

## Technical Data

Model	GW5/ (5.12-49.92)-ESA-PS-G20	GW8/ (5.12-49.92)-ESA-PS-G20	GW10/ (5.12-49.92)-ESA-PS-G20
Cell Type	LFP (LiFePO4)		
Module Nominal Energy (kWh)	5.12 / 8.32		
System Usable Energy (kWh)	5 ~ 48		
Nominal Voltage (V)	380		
Operating Voltage Range (V)	350 ~ 550		
Max. Input Power (kW)	10.0	16.0	20.0
Max. Input Voltage (V)	600		
MPPT Operating Voltage Range (V)	40 - 560		
Start-up Voltage (V)	50		
Max. Input Current per MPPT (A)	20		
Max. Short Circuit Current per MPPT (A)	26		
Number of MPP Trackers	2	4	4
Number of Strings per MPPT	1 / 1	1 / 1 / 1 / 1	1 / 1 / 1 / 1
Nominal Output Power (kW)	5.0	8.0	10.0
Nominal Output Voltage (V)	220 / 230 / 240, L / N / PE		
Max. AC Current Output to Utility Grid (A)	21.8	34.8	43.5
Weight (kg)	Inverter: 24 / Battery: 79		
Dimension (W × H × D mm)	Inverter: 800 × 300 × 270; Battery: 800 × 295 × 270		
Ingress Protection Rating	IP66		
Max. Output Current (A)	22.8	36.4	43.5
Nominal Output Voltage (V)	220 / 230 / 240, L / N / PE		
Nominal Output Frequency (Hz)	50 / 60		





# Batteries



In most New Zealand homes, a large proportion of the energy produced by solar power panels is sent back to the grid because it's generated when it's not needed (e.g. in the middle of the day). Adding home battery storage to a new or existing solar power system allows you to store your unused energy to use at night, on low sunlight days, when utility rates are more expensive or during blackouts. Batteries also provide a smart way to offset your electricity costs as you maximise your solar energy usage and minimise your reliance on the grid.

In August, we'll also be introducing the brand new Enphase IQ Battery 5P to our existing GoodWe battery range. With its app-based monitoring and control, the Enphase IQ allows homeowners to enjoy the benefits of a complete home energy management system. It comes in a modular 5 kWh capacity to provide the most flexibility for a customer's storage requirements, and installation is quick and easy!

# Batteries – Goodwe



Lynx Home U Series - 5.4-32.4kWh | Low voltage battery

## Technical Data

Model	LX U5.4-20	2*LX U5.4-20	3*LX U5.4-20	4*LX U5.4-20	5*LX U5.4-20	6*LX U5.4-20
Rated Energy (kWh)	5.4	10.8	16.2	21.6	27.0	32.4
Usable Energy (kWh)*1	5.4	10.8	16.2	21.6	27.0	32.4
Cell Type	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Cell Configuration	16S1P	16S1P	16S1P	16S1P	16S1P	16S1P
Nominal Voltage (V)	51.2	51.2	51.2	51.2	51.2	51.2
Operating Voltage Range (V)	47.5 ~ 57.6	47.5 ~ 57.6	47.5 ~ 57.6	47.5 ~ 57.6	47.5 ~ 57.6	47.5 ~ 57.6
Max. Charging / Discharging Current (A)	50	100	100	100	100	100
Max. Charging / Discharging Power (kW)	2.56	5.12	5.12	5.12	5.12	5.12
Weight (Kg)	57	114	171	228	285	342
Dimensions (W × D × H) (mm)	505 × 570 × 175 (LX U5.4-20)	505 × 570 × 175 (LX U5.4-20)	505 × 570 × 175 (LX U5.4-20)	505 × 570 × 175 (LX U5.4-20)	505 × 570 × 175 (LX U5.4-20)	505 × 570 × 175 (LX U5.4-20)
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65
Installation Location	Grounded	Grounded	Grounded	Grounded	Grounded	Grounded

\*1: Test conditions, Cell Voltage 2.5 ~ 3.65V, 0.5C charge & discharge at +25 ±2°C for battery system at beginning life. System Usable Energy may vary with different inverter.

\*: Please visit GoodWe website for the latest certificates

# Batteries – Goodwe



Lynx Home F Series - High voltage battery

## Technical Data

Model	LX F9.6-H-20	LX F12.8-H-20	LX F16.0-H-20	LX F19.2-H-20	LX F22.4-H-20	LX F25.6-H-20	LX F28.8-H-20
	1						
Usable Energy (kWh)*	9.6 kWh	12.8 kWh	16.0 kWh	19.2 kWh	22.4 kWh	25.6 kWh	28.8 kWh
Cell Type	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Voltage (V)	192 V	256 V	320 V	384 V	448 V	512 V	576 V
Operating Voltage Range (V)	172.2~216.6 V	229.6~288.8 V	287.0~361.0 V	344.4~433.2 V	401.8~505.4 V	459.2~577.6 V	516.6~649.8 V
Nominal Dis- / Charge Current (A)*2	35 A	35 A	35 A	35 A	35 A	35 A	
Nominal Power (kW)*2	6.72 kW	8.96 kW	11.2 kW	13.44 kW	15.68 kW	17.92 kW	20.16 kW
Weight (Kg)	120 Kg	154 Kg	188 Kg	222 Kg	256 Kg	290 Kg	324 Kg
Dimensions (W × D × H) (mm)	600 × 380 × 715	600 × 380 × 871	600 × 380 × 1027	600 × 380 × 1183	600 × 380 × 1339	600 × 380 × 1495	600 × 380 × 1651
Protection Degree	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)	IP55 (Outdoor / Indoor)
Installation Location	Grounded	Grounded	Grounded	Grounded	Grounded	Grounded	Grounded

Rated Energy\*: Test conditions, Cell Voltage 2.5~3.65V, 0.5C charge & discharge at +25±3 °C.

Usable Energy\*: Test conditions, 90% DOD, 0.5C charge & discharge at +25±3 °C. Max. Continuous Discharge Current\*/Power\*: Max. Continuous Charge/Discharge and power derating will occur related to Temperature and SOC.

# Optimisers



Optimisers allow you to get the most energy production possible from your Rheem Solar Solution, even in areas of shade or dust. Tigo optimisers, in particular, connect to each solar module in seconds and unlock 25+ years worth of additional benefits for your installation. The Tigo TS4-A-O improves production, safety, and intelligence in both new designs and existing systems. Easy installation and long-term reliability reduce system downtime and truck rolls, while Tigo's Energy Intelligence platform enables quicker onsite commissioning and comprehensive remote monitoring.

The Tigo Access Point (TAP) improves the data management of your solar array by wirelessly communicating with Tigo smart modules and retrofit devices. TAP also greatly improves safety with module-level deactivation. When paired with a Cloud Connect Advanced (CCA), the TAP provides unparalleled visibility into your solar installation.

# Optimisers – Tigo

Tigo TS4-A-O



## Technical Data

Model	TS4-A-O
Maximum Input Voltage	80V
Input Voltage Range	16 – 80V
Maximum Input Current (IMP)	15A
Maximum Power	700W
Maximum Output Current	IDCU MAX
Maximum Output Voltage	VDCU MAX
Recommended Fuse Rating	20A
Conductor AWG	12
Weight (g)	520
Dimensions (H x W x D)	139.7 x 138.4 x 22.9 mm
Outdoor Protection Rating	IP68, NEMA 3R
Maximum Elevation	2000m

# Access Point – Tigo

Tigo Access Point (TAP)



## Technical Data

Model	Tigo Access Point
Input Voltage Range	5V <sub>DC</sub> - 25V <sub>DC</sub>
Consumption	0.5W average, 1W peak
Recommended Cable Type	RS485, 18-22AWG
Operating Temperature Range	-30°C to +70°C
Environmental Rating	IP68, Type 4R
Maximum distance from TAP to closest TS4 (m)	10m
Maximum distance from TAP to farthest TS4 (m)	35m
Total TS4 units supported*	Up to 300
Weight (g)	227
Dimensions	126.2mm x 130.0mm x 26.8mm (with bracket)

\*environmental conditions can impact the number of units supported



# EV Charger

With rising energy prices, solar owners are now looking to maximise self-consumption and back-up of PV power. By combining GoodWe inverters and Lynx Home Series battery options, homeowners can create a smart and highly efficient energy storage system. Now, NZ home owners with an electric vehicle (EV) can further expand their system by including a GoodWe EV Charger to maximise their energy independence. With its modern, user-friendly design, superb safety and reliability ratings, remote control and monitoring, and flexible adaptable applications, the GoodWe EV Charger is the perfect fit for a wide variety of homes.



## EV Charger – GoodWe

HCA Series | AC Charger | Single Phase - 7kW AC Charger | Three Phase - 11/22kW



### Technical Data

Model	GW7K-HCA	GW11K-HCA	GW22K-HCA
Nominal Input Voltage (V)	230, L / N / PE	400, 3L / N / PE	400, 3L / N / PE
Nominal Input Current (A)	32	16	32
Nominal AC Grid Frequency (Hz)	50/60	50/60	50/60
Nominal Output Power (W)	7000	11,000	22,000
Nominal Output Voltage (V)	230, L / N / PE	400, 3L / N / PE	400, 3L / N / PE
Nominal Output Current (A)	32	16	32
Nominal Output Frequency (Hz)	50/60	50/60	50/60
Residual Current Protection	6mA DC	6mA DC	6mA DC
Operating Temperature Range	-30 ~ +50	-30 ~ +50	-30 ~ +50
Mounting Method	Wall or Floor (With floor post Optional)	Wall or Floor (With floor post Optional)	Wall or Floor (With floor post Optional)
Weight (Kg)	5	6	6
Dimensions	208 × 450 × 150	208 × 450 × 150	208 × 450 × 150

# Racking & Components

We can provide all the equipment you need to set up your solar solution. Whether you're looking for a residential or commercial application, our range of racking and components will make the installation process safe, secure and straightforward.

We only stock robust products that can endure the often-harsh NZ conditions, including a selection of the popular PV-ezRack range. PV-ezRack have embraced sustainable design, offering the solar industry creative and versatile racking solutions.

Their robust systems are suitable for both tin and tile roofs and can be adapted across a wide range of applications. Unique Kliplok clamps and accessories compliment PV-ezRack's technically advanced solar mounting gear, ensuring you have everything you need to install your solar solution.



**Reliable, robust roof mounting system with high quality components designed for the harshest conditions.**

PV-ezRack® SolarRoof has been developed for both residential and commercial PV installations on tin and tile roofs. The components are easy to install and can be used for flush as well as tilted systems, on a large variety of roof types. The interfaces, rails and clamps use high quality, robust and corrosion resistant materials including structural grade aluminium alloy (AL6005-T5) and stainless steel (SUS304)

## Quick and Easy Installation

Innovative and internationally patented, the Z-Module and Click Module technology are used in almost all SolarRoof components. The Z-Module and Click Module quick provide easy and safe installation method. They can be inserted into the rail at any given point, and secured with just two or three hand grips.

## Versatility

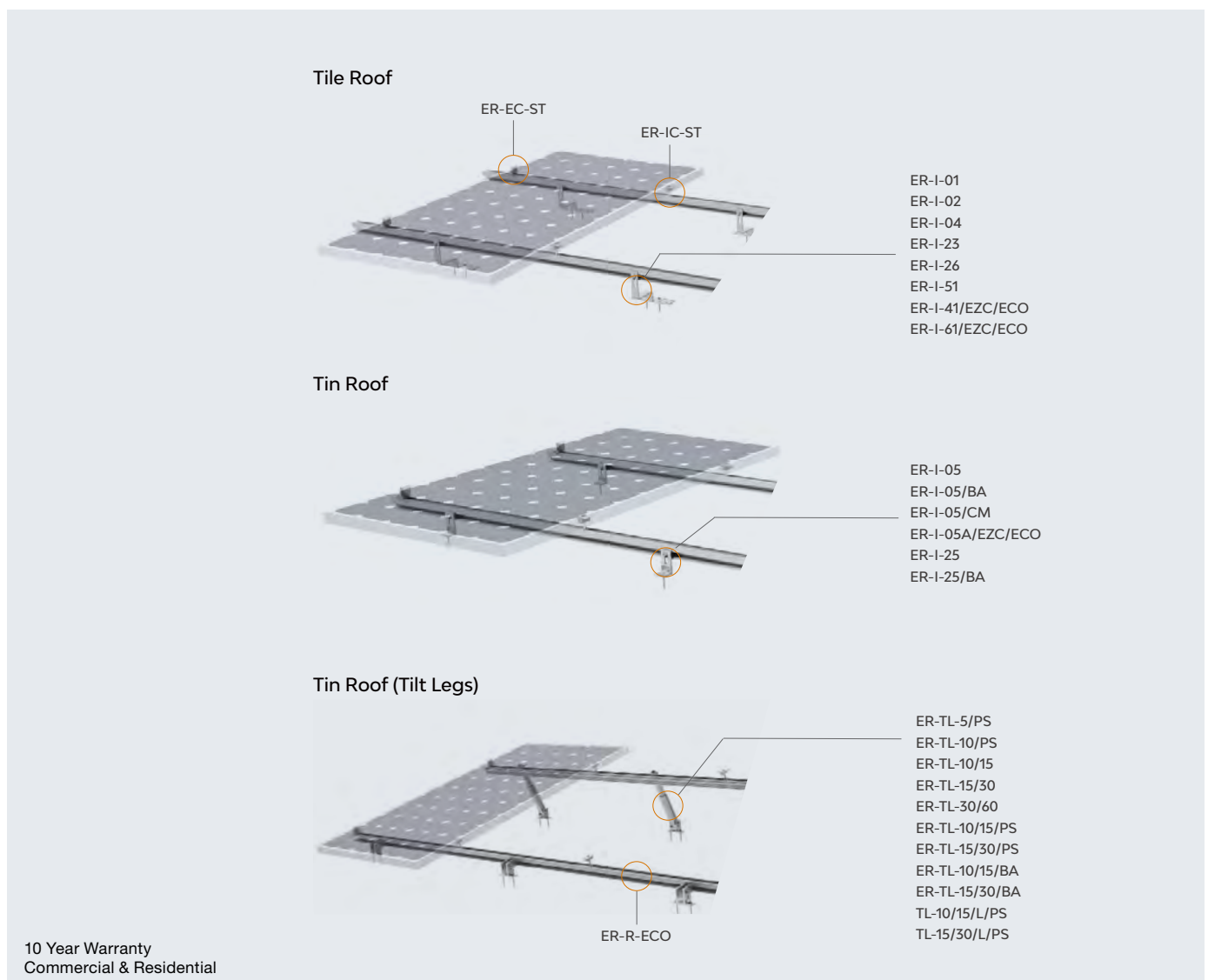
A large variety of roof hooks, metal roof fixings, tilt legs and adapters help ensure that you will find a suitable fixing method for almost every roof, where fixing with penetration is required.

## Wide Range of Tilting

With three adjustable tilt legs, these parts can tilt panels from between 10-60 degrees. Through its innovative design, the tilt legs can cope with all common purlin distances.

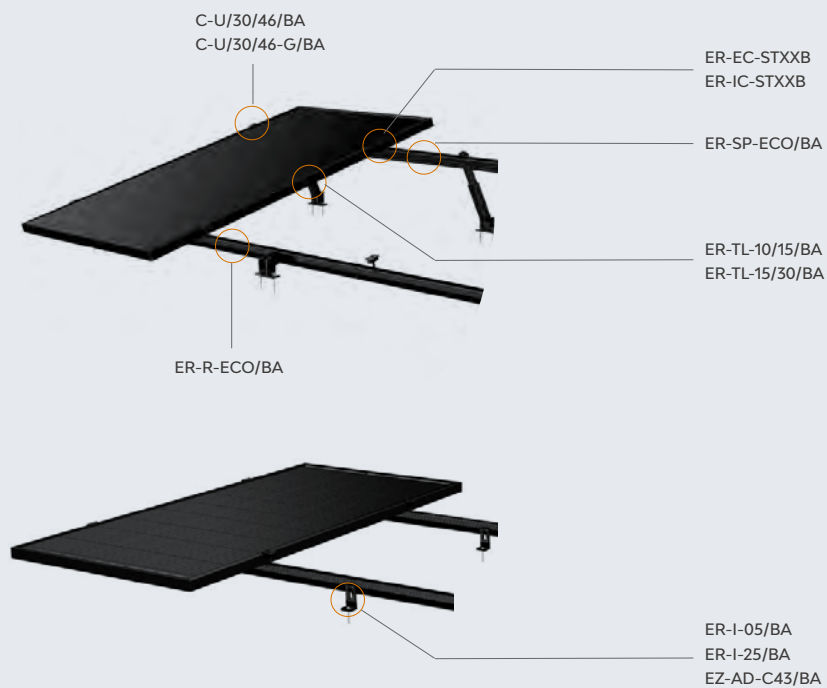
## Universal

SolarRoof has suitable inter and end clamps for every size of solar panel including frameless, thin film panels or special clamps for cyclonic regions. In the growing range of clamps, cable clips, adapters and accessories you are sure to find the parts you require for your residential or commercial rooftop mounting needs.



# Racking – SolarRoof – Black Anodized

The reliable, robust SolarRoof mounting system is also available in a black anodized finish.



10 Year Warranty  
Commercial & Residential



## Pre-assembled, durable and earthed ground mount frame with ramming

PV-ezRack® SolarTerrace II-A is a pre-assembled ground mount system with full earthing function suitable for commercial and utility scale installations. This quality frame is trimmed at every angle for fast deployment reducing labour costs. It was designed with a unique post profile which allows reduced embedment and therefore saves on material and labour. These features, combined with its high grade of pre-assembly make SolarTerrace II-A one of the best ground mount system you can find.

### Reduced Labour Costs

Through our unique, patented component design and pre-assembled supports with pre-installed positioning clamps\*\* labour time and costs are greatly reduced.

### Reduced Component Costs

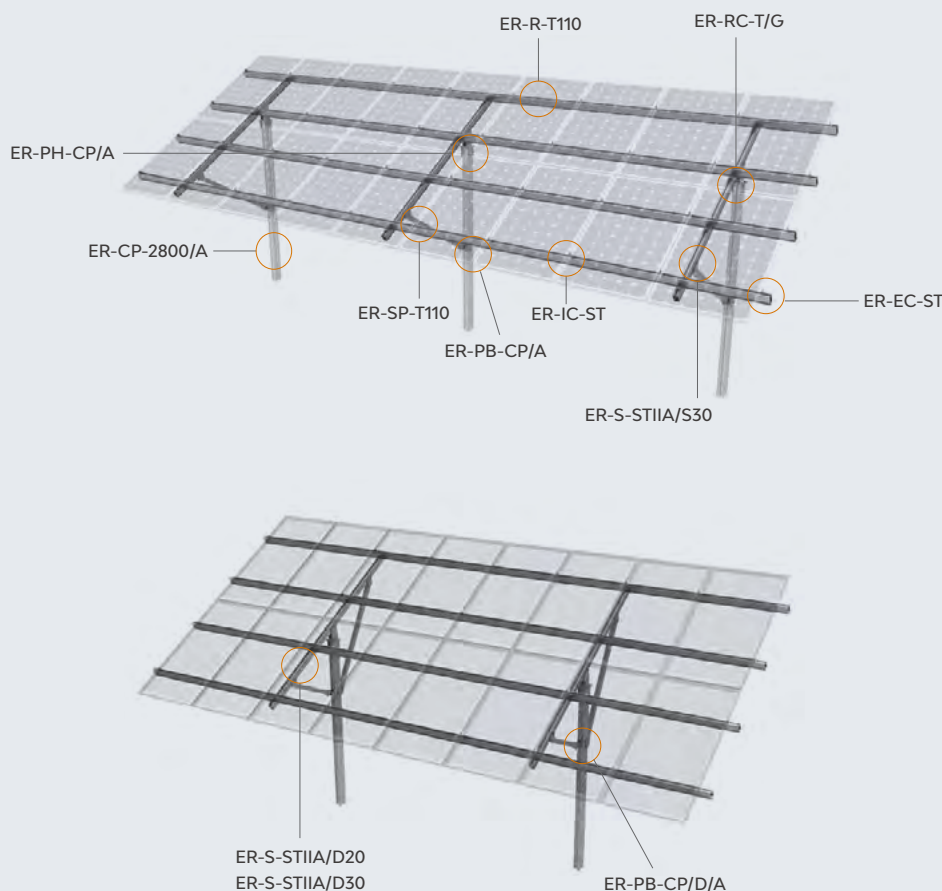
Our unique C-Post was designed specifically for ramming. This results in an increased friction against up-lift and it therefore requires less embedment as conventional standard posts or I-beams, which reduces not only labour time for ramming but also material costs.

### Wide Range of Adjustments

As ramming can never be done exact on millimetre, the post head is designed with sufficient horizontal rotation and vertical adjustments. This combined with a generous design tolerance levels makes it easy to get the panels perfectly aligned even if the ramming isn't 100%.

### Full Earthing Function

With pre-fitted pressure bolts and star washers in post head, post brace and pre-assembled support, it can create earthing continuity from T rail to post. In this way, SolarTerrace II-A system is a full earthing system.



10 Year Warranty  
Utility & Commercial

## Universal and earthed ground mount frame for corrosive environments and for tough soil conditions

Manufactured from high quality structural grade and anodised aluminium, PV-ezRack® SolarTerrace III-A is the perfect mounting solution for corrosive environments. The support legs can be installed either with concrete ballast footing or on ground screws which makes it suitable for almost every soil condition. Its user friendly high level of prefabrication makes it easy to install and therefore practical for smaller commercial and even for residential installations.

### Durable Even in Harsh Environments

STIII-A contains only 6005 Aluminium alloy and 304 stainless steel (316 on request), which makes it suitable for even the toughest environments, such as corrosive sites close to coastlines.

### Support Leg Is Delivered in One Piece

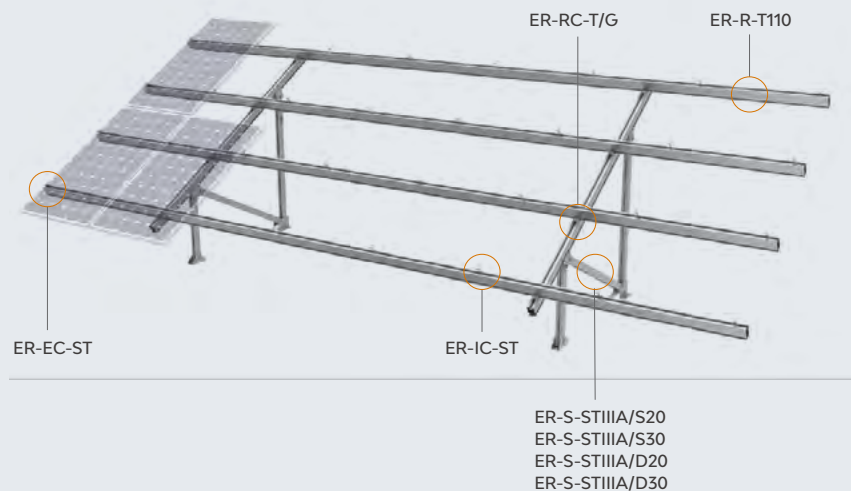
The support legs of the STIII-A are completely pre-assembled, they only needed to be opened up and secured to the foundation. They even have the positioning rail clamps pre-installed\*\*, so you don't need to measure and mark the rail positions anymore. The combination of these features is saving valuable time in assembly and logistics, making it one of the fastest system on the market.

### Suitable for All Soil and Ground Type

The support legs can be installed either with a concrete ballast footing or with ground screws. This makes STIII-A suitable for the most challenging soil conditions where ramming is not possible.

### Full Earthing Function

With pre-fitted pressure bolts and star washers in the pre-assembled support, it can create earthing continuity from T-Rail to support. In this way, SolarTerrace III-A system is a full earthing system.



10 Year Warranty  
Utility, Commercial & Residential

# Racking – PostMount 1/2/3-A for XL Panels

## Robust pole mount system with adjustable angle for one, two and three XL panels

Clenergy's PV-ezRack® PostMount 1/2/3-A for XL Panels delivers flexible and durable designs to mount from one to three panels, up to 2100X1100mm per post. It's ideal for remote off-grid applications such as water pumps or small residential and commercial systems. The panel tilt is easily adjustable between 10° and 60° throughout the year and comes with hassle-free mounting thanks to patented components such as the PV-ezRack® rails and clamps. The combination of high quality aluminium, stainless steel and galvanised steel components make this a robust, reliable system with excellent corrosion resistance.

### Suitable for Every Soil Condition

With its concrete foundation, PostMount-A can be installed on even or uneven ground or on a slope, making it suitable for any soil type and a wide range of applications.

### Adjustable Tilt Angle

The steel cap (post head) is designed to tilt panels between 10° and 60° to ensure that you get the required power output you need anywhere, anytime. Changing the angle merely requires a single pair of spanners.

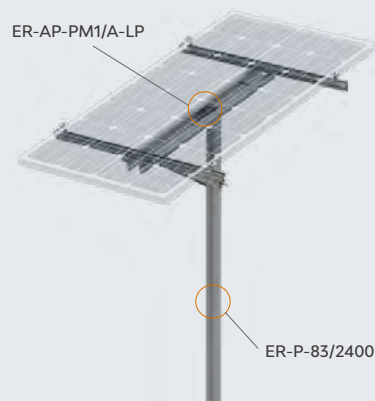
### Robust and Reliable

Mounted on aluminium rails the panels are supported by robust galvanised steel landscape and master tubes secured with stainless steel bolts. The post can be fixed into a concrete foundation and also used as a ramming option.

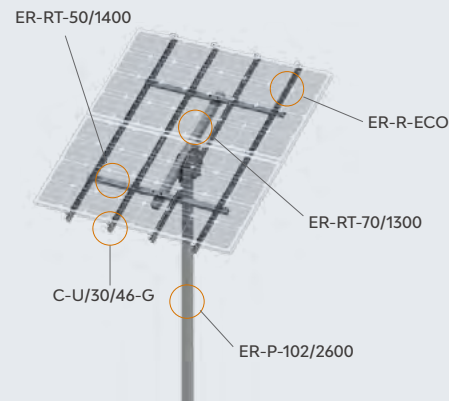
### Quick and Easy Installation

Innovative and internationally patented, the Z-Module technology is used in almost all PV-ezRack® components. The Z-Module provides a quick, easy and safe installation method and can be inserted in to the rail at any given point, secured with just three hand grips.

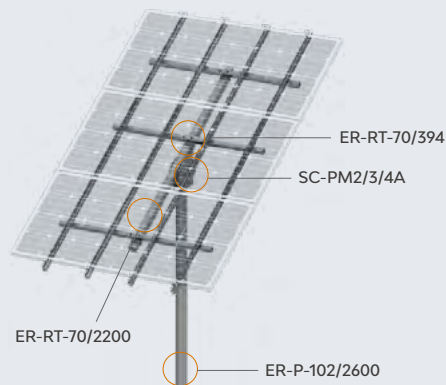
PM 1-A for XL Panels



PM 2-A for XL Panels



PM 3-A for XL Panels



10 Year Warranty  
Commercial & Residential

# Racking – PostMount 4/6-A for XL Panels

## Robust pole mount system with adjustable angle for four and six XL panels

Clenergy's PV-ezRack® PostMount 4/6-A for XL Panels delivers flexible and durable designs to be mounted between four and six panels, up to 2100x1100mm per post. It's ideal for remote off-grid applications such as water pumps or small residential and commercial systems. The panel tilt is easily adjustable between 10° and 60° throughout the year and comes with hassle-free mounting thanks to patented components such as the PV-ezRack® rails and clamps. The combination of high quality aluminium, stainless steel and galvanized steel components make this a robust, reliable system with excellent corrosion resistance

### Suitable for Every Soil Condition

With its concrete foundation, PostMount can be installed on even or uneven ground or on a slope, making it suitable for any soil type and a wide range of applications.

### Adjustable Tilt Angle

The steel cap (post head) is designed to tilt panels between 10° and 60° to ensure that you get the required power output you need – anywhere, anytime. Changing the angle merely requires a single pair of spanners.

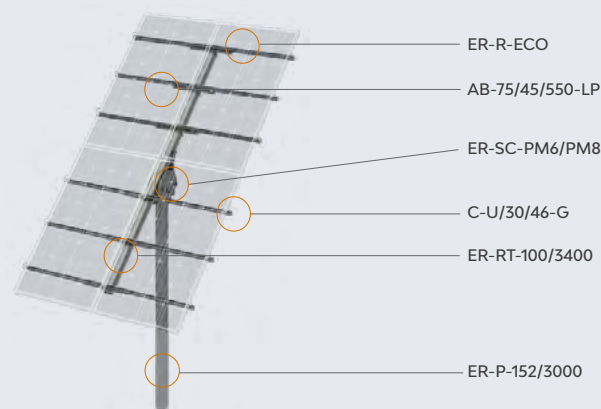
### Robust and Reliable

Mounted on aluminium rails the panels are supported by robust galvanised steel landscape and master tubes secured with stainless steel bolts. The post can be fixed into a concrete foundation and also used as a ramming option.

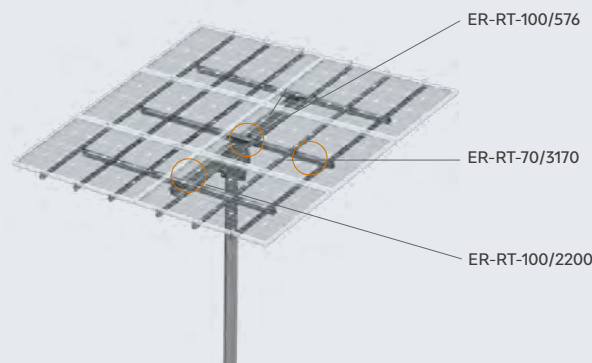
### Quick and Easy Installation

Innovative and internationally patented, the Z-Module technology is used in almost all PV-ezRack® components. The Z-Module provides a quick, easy and safe installation method and can be inserted into the rail at any given point, secured with just three hand grips.

PM 4-A for XL Panels



PM 6-A for XL Panels



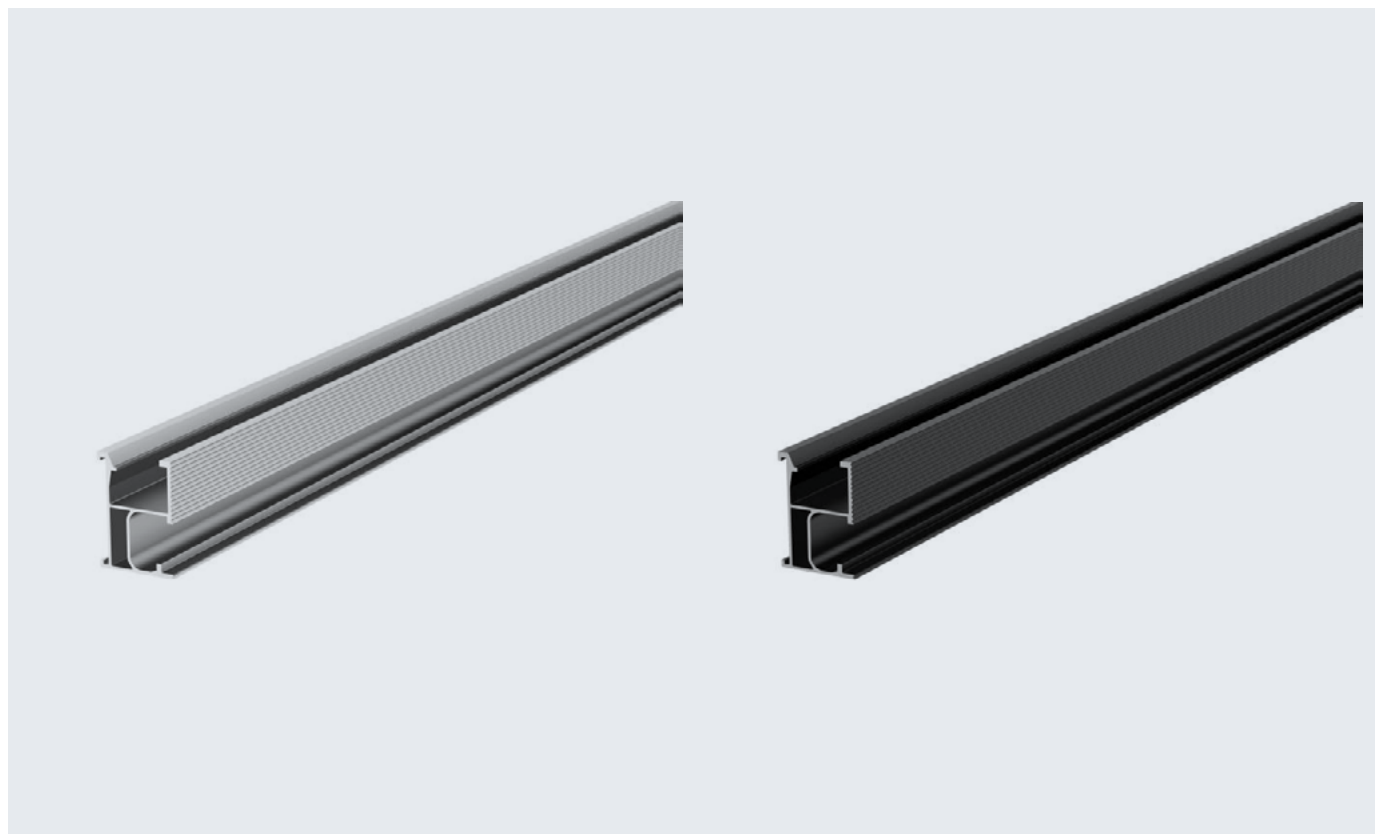
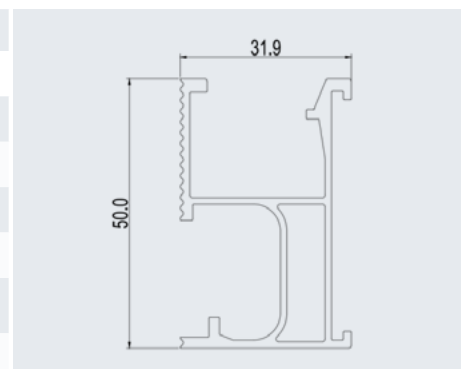
10 Year Warranty  
Commercial & Residential



# Racking – Elite Rail ER-R-ELT/XXXX/BA

Part No.: ER-R-ELT/XXXX/MF, ER-R-ELT/XXXX/BA

Roof type	For Clenergy' s PV Mounting System
Dimension	W31.9mm*H50.0mm
Standard Length	3600, 4400 and 4600mm
Packaging	90 pcs per pack; 4 packs (360 pcs) per pallet
Weight	0.695 Kg/m
Material	AL6005-T5
Color	ER-R-ELT/XXXX/MF: Silver (Mill Finished) ER-R-ELT/XXXX/BA: Black (Black Anodised)
Standard	AS/NZS 1170.2:2021



# Support & Where to Buy

We have a passionate sales team who operate around the country, so support for your solar solution is never far away. Our Rheem Solar Team can also provide design tools and are available to solve project challenges.

We can help you design systems, prepare system schematics/specifications and provide basic wiring schematics, and will even offer quoted solutions based on a client's power needs and building.

## FOR SALES ENQUIRIES



**Paul Sands**  
Solar Sales

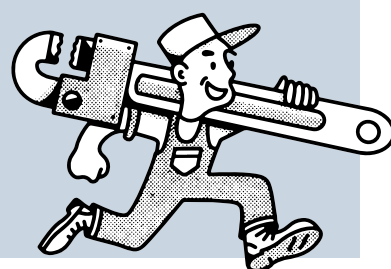
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[paul.sands@rheem.co.nz](mailto:paul.sands@rheem.co.nz)

**Kevin Adams**  
Solar Sales

022 676 1258  
[kevin.adams@rheem.co.nz](mailto:kevin.adams@rheem.co.nz)

## FOR TECHNICAL SUPPORT

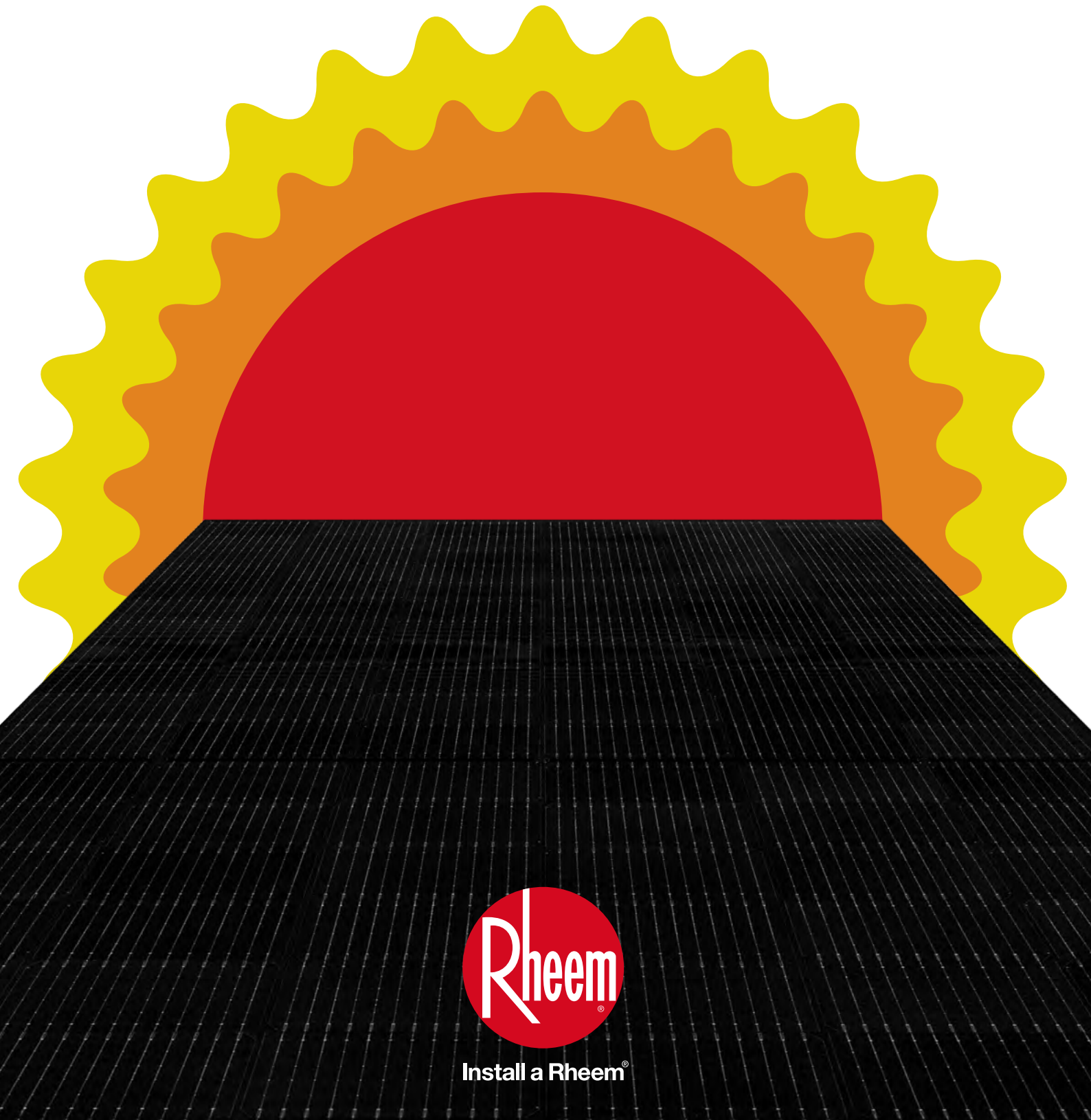
[solar@rheem.co.nz](mailto:solar@rheem.co.nz)  
0800 657 336







# JOIN THE SMART ENERGY REVOLUTION



**Install a Rheem®**

## **Rheem New Zealand Limited**

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