Refresh

SOLAR PV & BATTERY STORAGE TECHNOLOGY

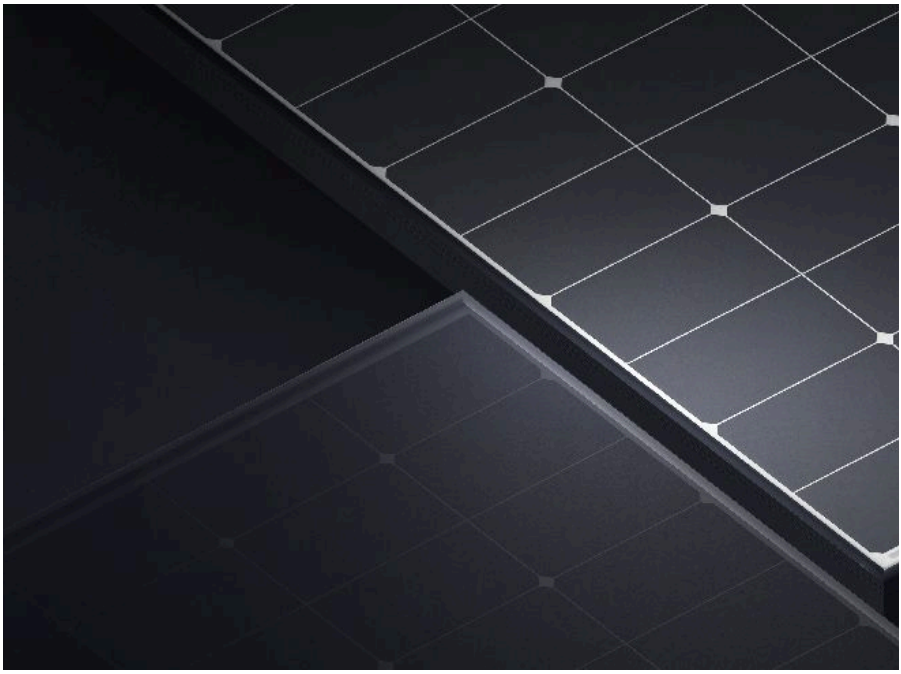
PRODUCT INFORMATION PACK **2026**

TURN SUNLIGHT INTO SAVINGS

We provide a range of solar and battery packages to help you lower your energy costs and reduce your carbon footprint. We also offer bespoke systems to accommodate all homes, requirements, & lifestyles.

PRODUCT INFORMATION

LONGi Hi-MO Solar Panels



LR5-54HTB | 445~455M

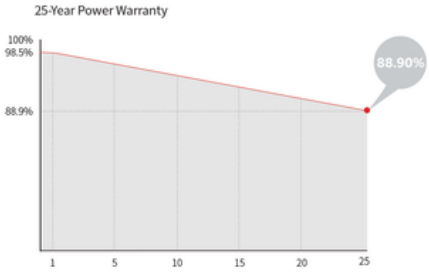
- Suitable for Distribution Market
- Pure black for extreme elegance
- Better energy generation performance
- High-quality module guarantees long-term reliability

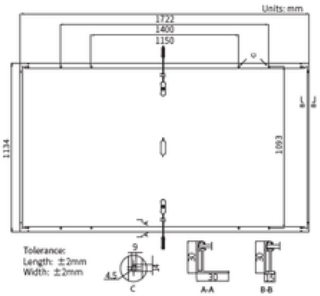
25 — 25-year Warranty for Materials & Processing

25 — 25-year Warranty for Extra Linear Power Output

23.3%	0~3%	<1.5%	0.40%
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-25 POWER DEGRADATION

LONGi Hi-MO Solar Panels





Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm², ±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimension	1722×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC

Electrical Characteristics

STC : AM1.5 1000W/m² 25℃ NOCT : AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR5-54HTB-415M		LR5-54HTB-420M		LR5-54HTB-425M		LR5-54HTB-430M		LR5-54HTB-435M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	415	310	420	314	425	318	430	321	435	325
Open Circuit Voltage (Voc/V)	38.83	36.46	39.03	36.65	39.23	36.83	39.43	37.02	39.63	37.21
Short Circuit Current (Isc/A)	13.78	11.13	13.85	11.19	13.93	11.25	14.00	11.31	14.08	11.37
Voltage at Maximum Power (Vmp/V)	32.56	29.71	32.76	29.89	32.96	30.08	33.16	30.26	33.36	30.44
Current at Maximum Power (Imp/A)	12.75	10.44	12.83	10.50	12.90	10.56	12.97	10.62	13.05	10.68
Module Efficiency(%)	21.3		21.5		21.8		22.0		22.3	

Operating Parameters

Operational Temperature	-40℃~+85℃
Power Output Tolerance	0~3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2℃
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/℃
Temperature Coefficient of Voc	-0.230%/℃
Temperature Coefficient of Pmax	-0.290%/℃

JA Full Black Solar Panels

JAM54D41 LB Series | 430- 455 W

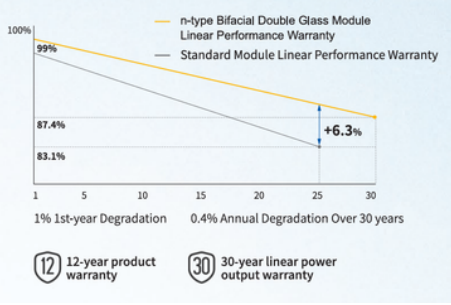
- Higher power generation, better LCOE
- Stylish all-black aesthetic
- Optimum temperature coefficient
- High-quality N-type bifacial double-glass module that enhances performance efficiency

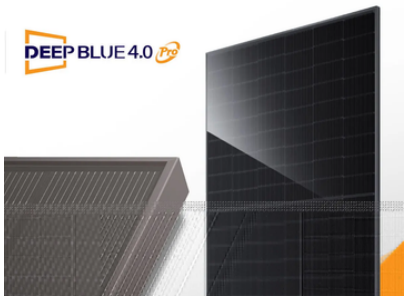
25 — 25-year Product Warranty

30 — 30-year Linear Power Output Warranty

22.5%	0~3%	1%	0.40%
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION

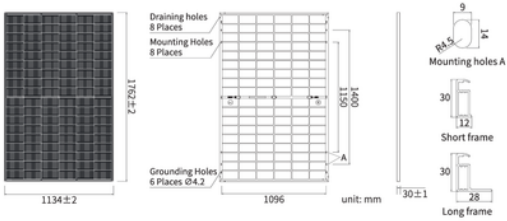
JA Full Black Solar Panels





MECHANICAL PARAMETERS

Cell	Mono
Weight	22kg
Dimensions	1762±2mm×1134±2mm×30±1mm
Cable Cross Section Size	4mm²(IEC), 12 AWG(UL)
No. of cells	108(6×18)
Junction Box	IP68, 3diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+) /400mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet, 936pcs/40HQ Container

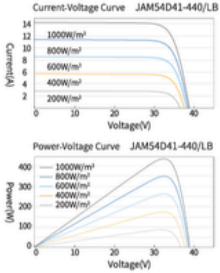


ELECTRICAL PARAMETERS AT STC

TYPE	JAM54D41 430/LB	JAM54D41 435/LB	JAM54D41 440/LB	JAM54D41 445/LB	JAM54D41 450/LB	JAM54D41 455/LB
Rated Maximum Power(Pmax) [W]	430	435	440	445	450	455
Open Circuit Voltage (Voc) [V]	38.50	38.70	38.90	39.10	39.30	39.50
Maximum Power Voltage(Vmp) [V]	32.12	32.29	32.47	32.65	32.82	33.00
Short Circuit Current(Isc) [A]	14.14	14.23	14.31	14.40	14.48	14.56
Maximum Power Current(Imp) [A]	13.39	13.47	13.55	13.63	13.71	13.79
Module Efficiency [%]	21.5	21.8	22.0	22.3	22.5	22.8
Power Tolerance	0~+3%					
Temperature Coefficient of Isc(α_Isc)	+0.046%/°C					
Temperature Coefficient of Voc (β_Voc)	-0.260%/°C					
Temperature Coefficient of Pmax(γ_Pmp)	-0.290%/°C					
STC	Irradiance 1000W/m², cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer.
They only serve for comparison among different module types.

CHARACTERISTICS



ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D41 430/LB	JAM54D41 435/LB	JAM54D41 440/LB	JAM54D41 445/LB	JAM54D41 450/LB	JAM54D41 455/LB
Rated Max Power(Pmax) [W]	464	470	475	481	486	491
Open Circuit Voltage(Voc) [V]	38.50	38.70	38.90	39.10	39.30	39.50
Max Power Voltage(Vmp) [V]	32.11	32.29	32.47	32.65	32.82	32.99
Short Circuit Current(Isc) [A]	15.27	15.36	15.46	15.55	15.64	15.73
Max Power Current(Imp) [A]	14.46	14.55	14.63	14.72	14.81	14.89
Irradiation Ratio (rear/front)	10%					

* Bifaciality=Pmax, rear/Rated Pmax, front

OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	30A
Maximum Static Load, Front	5400Pa(112 lb/ft²)
Maximum Static Load, Back	2400Pa(50 lb/ft²)
NOCT	45±2°C
Bifaciality*	80%±10%
Fire Performance	UL Type 38

DURA5 SOLAR 5.12KWH BATTERY

DURACELL® ENERGY

51.2V PD-5KWH-50V-2G

General Specification	
Dimension (WxDxH mm)	490 x 110 x 688mm
Weight	51.5±1kg
Installation	Stackable or Wall-mount
Operating/Working Temperature	-10°C~55°C
Environment	Indoor/Outdoor
Cooling	Natural Convection
Operating / Storage / Humidity	5%~95%RH
Operating Altitude	0-3000m (Derating above 2000m)
IP Rating	IP65
Cell Technology	LiFePO4
Cycles	8000
Scalabiliity	Max 32 Systems In Parallel Operation (stacks of 16)
Warranty	10 Years

DURA5 SOLAR 5.12KWH BATTERY

DURACELL® ENERGY

Performance	
Nominal Voltage	51.2Vdc
Battery module energy	5.12kWh
Useable energy	4.6kWh
Max output power	100A
Peak output power	110A
Operating voltage range (single phase)	43.2V-56.8V

Communication	
Display	LED indicator
Communication	CAN / RS485

Standard Compliance	
Certification	PACK:UN38.3, IEC62619, IEC61000, CELL:UN38.3, IEC62619, UL 1642, JET (more available upon request)

DURA-I G3 HYBRID INVERTER

DURACELL® ENERGY

Dura-i G3 Inverter - PD-DH1P-3.6K-G3

Also Available in Model Nos. PD-DH1P-4.6K-G3, PD-DH1P-5K-G3,PD-DH1P-6K-G3

The Dura-i charges and discharges your solar battery 20% faster than other hybrid inverters on the market and captures more solar throughout the day to give you more for your money. The Dura-i can handle a massive 10kWp of solar energy and has an uninterrupted power supply capable of backing up 26.1A (AC)

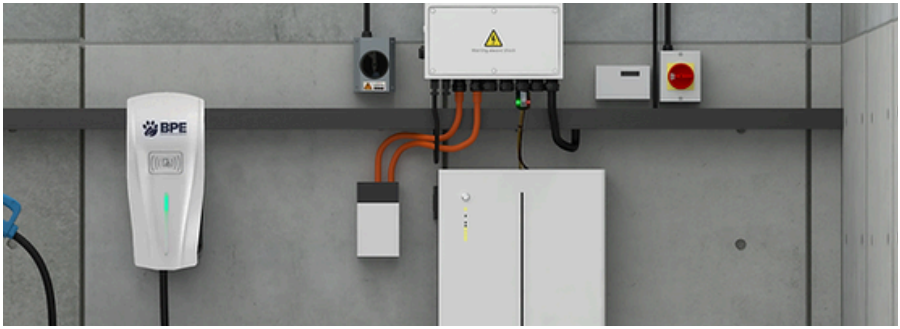
Specifications	
AC Rated Power	3.6 kW
Dimensions	377 x 452 x 206mm
Weight	20kg
Mounting	Wall bracket
Grid Connection	Single phase
IP Rating	IP65
Maximum AC Output Current	18A
MPP Voltage Range	70-540 V
No. MPP Trackers	2
Max. short current (input A/input B)	25A/25A
Max. PV voltage	550V
Max. PV power	10000W
Max. efficiency (PV to AC)	97.3%
Max. operation altitude	4000m
Operating temperature range	-25°~60°
Relative humidity	0~100%
Cooling concept	Natural Cooling

DURA-I G3 HYBRID INVERTER

DURACELL® ENERGY

Specifications	
DC/AC overvoltage protection	DC Type II, AC Type III
Battery connection type	Dedicated DC connector
AC connection type	Dedicated AC connector
Display	LED + APP
Monitoring	APP (OS/Android)
Communication Interface	RS485/CAN (for BMS), RS485, USB, Ethernet, DRM/RS485 for meter, Optional: WiFi/LAN
Grid safety	IEC 61727/62116/61683/60068, NRS 097-2-1, G98, G99, VDE4105, EN50549-1/-10, AS4777.2
Warranty	10 years

SUNSYNK
5.32KW BATTERY



SUN-BAT - 5.32

General Specification	
Dimension (WxDxH mm)	450x520x183mm
Weight	46.5kg
Installation	Floor stand or Wall mounted
Working Temperature 2	-20°C ~ 60°C
Storage Temperature	<25°C, 12 months <35°C, 6 months <45°C, 3 months
Operating / Storage / Humidity	<95%RH
Max Operating Altitude	<2000m
IP Rating	IP20
Cell Technology	LiFePO, Lithium-iron Phosphate
Cycle life3	6000 Cycles@ 80% DOD / 25°C / 0.5C, 60% EOL
Scalabiliity	Max 8 batteries in parallel

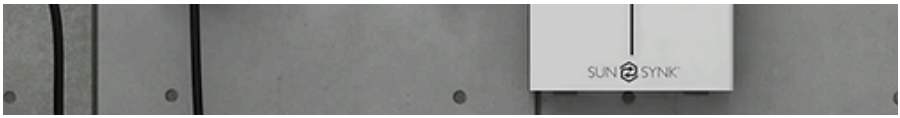
SUNSYNK 5.32KW BATTERY

Performance	
Nominal Voltage	51.2 Vdc
Nominal Capacity	104Ah
Battery Energy 1	5320 Wh
Charge Voltage	55.68~56.16Vdc
Discharge Voltage	45.6-56.16 vdc
Nominal Charge / Discharge Current	50A
Nominal Charge / Discharge Power	2500W
Max Charge / Discharge Current	100A
Max Charge / Discharge Power	5000W
Short Circuit Current	350A

Communication	
Display	SOC status indicator, LED indicator
Communication	RS232, RS485, CAN

Standard Compliance	
Certification	PACK:UN38.3, IEC62619, IEC61000, CELL:UN38.3, IEC62619, UL 1642, JET (more available upon request)

Ordering & Deliverable Part	
Product ordering part	SUN-BATT-5.32 battery SUN-BATT-5.32 parallel cable SUN-BATT-5.32 to PCS cable



SUNSYNK 3.6KW HYBRID INVERTER

SunSynk 3.6kW ECCO Hybrid Inverter

The SunSynk 3.6kW AC ECCO 7kWp Inverter is the next generation of super hybrid inverter with a 7000W MPPT and a rated AC output of 3.68 resulting in a system that can generate sufficient energy in Winter months to offset usage and charge a connected battery.

Specifications	
AC Rated Power	3.6 kW
Brand	Sunsynk
Dimensions	330 x 433 x 238 mm
Grid Connection	Single phase
IP Rating	IP65
Max DC Power	7 kW
Maximum AC Output Current	15
MPP Voltage Range	150-425 V
No. MPP Trackers	2
Features	Dual MPPT design Wifi stick Compatible with Lithium-ion batteries and Lead Acid batteries Up to 50kWh battery pack 5yr warranty as standard IP65 rated Anti-islanding protection Fully programmable power export Automatic switching from Grid-Tied to Off-Grid mode Up to 16 untis with the same firmware can be paralleled

TIGO POWER OPTIMISER

TS4-A-O

Optimization is a Flex MLPE function available as an integrated modular junction box base (TS4-O) or as an add-on unit (TS4-A-O). Design using unequal string lengths, mixed orientations, or areas of mismatch. Install in shaded areas with a reduced setback ratio. In addition to optimization, the TS4-A-O enables module level monitoring, and rapid shutdown in compliance with NEC 2014, 2017, 2020.

Features	
Simple, fast installation - snaps to a standard PV module frame or mounts to racking	Works with any system - fully compatible with thousands of different inverter models from more than 50 inverter brands
Intelligent optimisation - delivers the maximum energy from an array	25-years warranty
Module-level monitoring - full visibility into module and system-level production	Monitoring, rapid shutdown, and remote troubleshooting with Tigo Access Point (TAP) and Cloud Connect Advanced (CCA)
Rapid shutdown - a UL standards-certified component for photovoltaic rapid shutdown systems (PVRSS) worldwide	

TIGO POWER OPTIMISER

Electrical Specifications	
Maximum current	15 A/20 A
Input voltage range	16 - 80 V
Maximum input voltage	80 V
Maximum system voltage	1000 V/1500 V
Maximum output current	15 A
Maximum output power	700 W
Maximum fuse rating	25 A
Maximum efficiency	99.6%

AS 5033 Operational Output	
Maximum output current	I DCU MAX
Maximum output voltage	V DCU MAX
Maximum output power	P DCU MAX

Rapid Shutdown	
TS4 Conductor AWG	12
Rapid shutdown time limit	<30 sec
PVRSE-controlled conductor limits	<240 VA, <8 A, <30 V
UL 1741-compliant PVRSE	Yes
Communications	Wireless

Connections	
Input (from module) cable lengths	0.12/0.62 m
Output (to string) cable lenghts	1.2/2 m
Connectors	MC4/EVO2

TIGO POWER OPTIMISER

Environmental Specifications	
Operating temperature range	-40 -70°C (-40 - 158°F)
Storage temperature range	-40 - 85°C (-40 - 185°F)
Maximum elevation	2000 m (6560 ft.)
Outdoor IP rating	IP68/NEMA 3R

Mechanical Specifications	
Dimensions (H/W/D)	139.7 x 138.4 x 22.9 mm (5.4 x 5.5 x 0.9 in.)
Weight	520 g (1.15 lb.)

General Specifications	
Standards Compliance	FCC 15b, ETSI EN 301 489, CISPR 31, CSA 22.2, IEC 62109, NEC 690.12 UL 1741 PVRSE/PVRSS
Warranty	25 years

eddi WATER DIVERTER

myenergi

eddi ECO-SMART ENERGY DIVERTER

The eddi is an eco-smart energy management system. It diverts surplus power from solar PV or wind generation to a designated heating appliance such as an immersion heater. This excess energy will go directly to the appliance (or two sequentially). eddi allows you to stop exporting surplus energy back to the grid and saves you money on your energy bill; eddi utilises myenergi's proprietary VariSine TM compliance with worldwide power grid standards.

- Internet connected & remote controllable
- Works with heat pumps
- 3-Year Warranty

Features	
3.68kW / 16A max heater load	Support two heaters (sequentially)
Expansion module option - 2 extra outputs with temperature control	Wall mounting bracket for ease of installation
Integral bypass switch	Overload and short-circuit protection
Graphical back-lit LCD screen for ease of use	Ethernet port and built-in WiFi for connecting to the internet
Fan-less cooling	Complies with CE and UKCA Requirements
Built-in programmable boost timers	Works alongside battery storage systems
VariSine PWM technology	Energy monitoring on the go via the myenergi app

eddi WATER DIVERTER

myenergi

Performance	
Power Control Technology	WariSine pur sine wave (pulse Width Modulation)
Outputs	2 (Sequential operation with selectable priority)
Bypass Switch	Integral On/Off/Bypass Switch
Cooling	Rear mounted passive cooled heatsink
Indicators	LED indication: Supply On. Heater 1 and Heater 2 active
Display	Graphical LCD with LED backlight (Shows heating status and savings data)
PWM Resolution	0.1%
Measurement Accuracy	+/- 1%
Power Conversion Efficiency	97.5% typ
Compliance	LVD 2014/35/EU, EMC 2014/30/EU, EN 60335-1 :2012, EN 550141 :2006, EN 55014-2 :1997, +A1 :2001+A2 :2008, EN 61000-32 :2006, +A1 :2009+A2 :2009, EN61000-3-3 :2008

Mechanical Specs	
Dimensions	220 x 205 x 87mm (excluding wall bracket)
Weight	4.3kg (excluding wall bracket)
Protection Degree	IP20
Enclosure Material	Painted Zintec Steel
Operating Temperature	-20°C to +40°C
Mounting Method	Wall mounting bracket

eddi WATER DIVERTER

myenergi

Electrical Specs	
Rated Input Power	3.68kW
Rated Supply Voltage	230V AC Single Phase (+/- 10%)
Supply Frequency	50Hz
Rated Current	16A
Standby Power Consumption	3W Typical
Generator Size Supported	No limit (Subject to 100A per phase grid supply)
Heater Load Size	100W min. 3.68kW max.
Wireless Interface	868 / 915MHz (proprietary protocol) for wireless sensor and remote monitoring options
Grid Current Sensor	100A max. primary current, 16mm max. cable diameter
Supply Cable Entry	Bottom entry

Relay & Sensor Board (Optional)	
Economy Tariff Sense Input (eSense)	230V AC sensing (2.5kV isolated)
Multifunction Relay	2x 16 Amp
Temperature Sensor Inputs	2x PT1000

REQUEST A FREE SOLAR PROPOSAL

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