



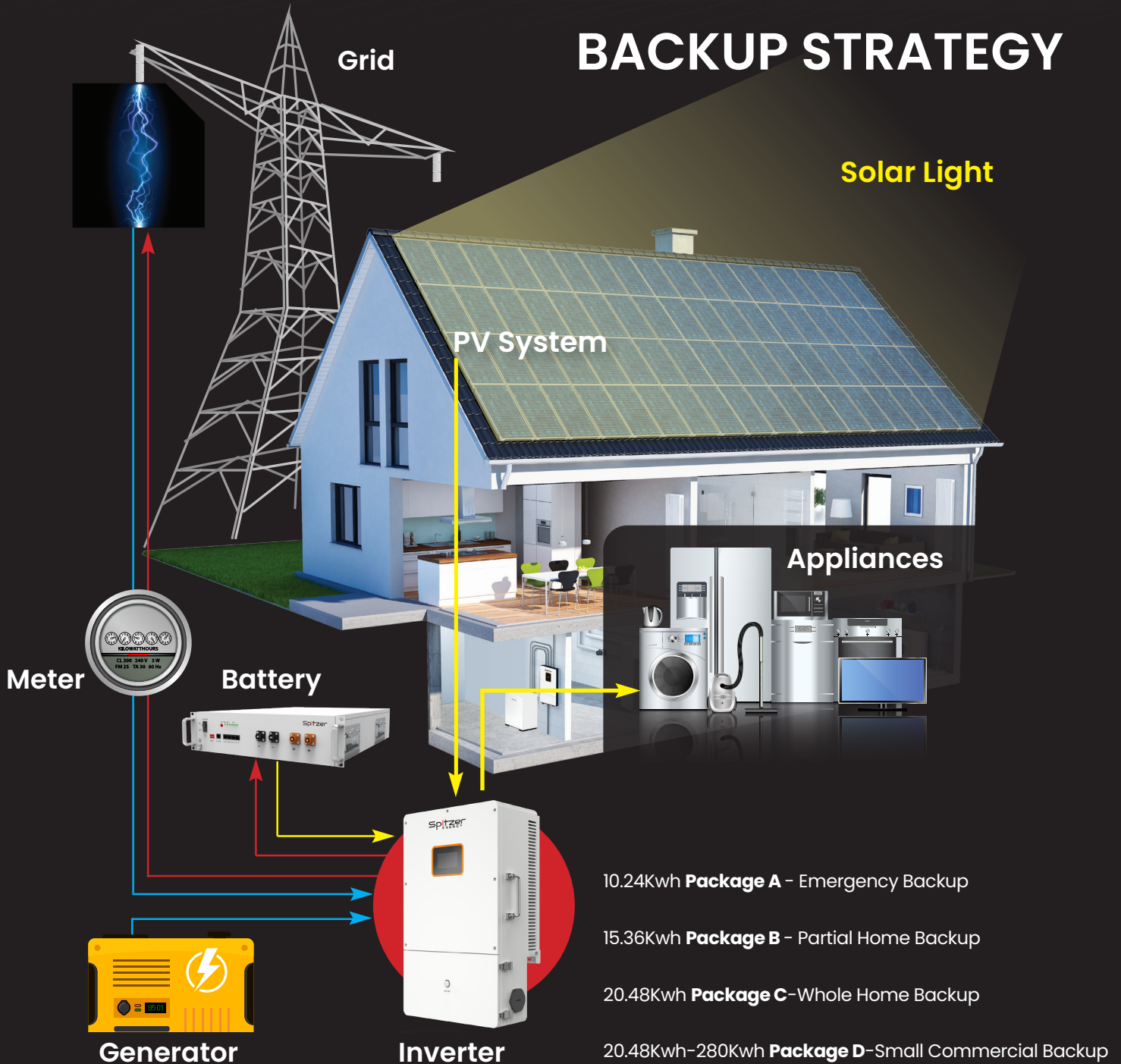
Spitzer
ENERGY

Empowering Your Solar Solutions

Energy Storage System

We provide safe, efficient, and affordable products to the US market to enable the adoption of green energy.

BACKUP STRATEGY





Hybrid Inverter



Hybrid Inverter



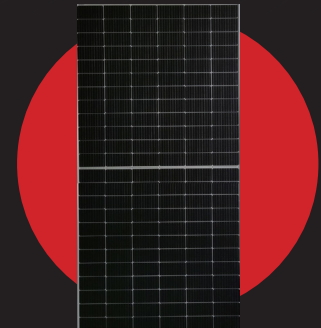
Micro Inverter



Modular Battery



Wall Mount Battery



Solar Panel



High Standard

We meet the highest standards of safety

Tier 1 prismatic lithium iron phosphate cells, built to withstand the test of time, and capable of whole home backup.

- Rigorously tested, UL 1973, UL 9540, UL 9540A
- ETL / Intertek listed, tested, and passed
- Warranty:
Battery: 6000 Cycles or 10 Years.
Inverter: 10 Years.
(Optional extended warranty)



Flexible

Scalable solutions for any home

5.12 KWh Capacity Modular, with each stack supporting 2-6 modules. and Stackable Battery System Expandable up to 280 KWh.

- DC and AC Compatible Solution for interconnectivity with new and existing solar systems.
- Space saving. Easily fits indoor & outdoor. Flexible mounting solutions.



Economical

Three work modes help to save money

- Self-Consumption: so you can fully use your own PV energy.
- Savings Optimization to avoid peak rate time-of-use (TOU).
- Emergency Backup system to securely power your home even when the power is out.



SPZ HI-7.5KW-LV

5kW AC

7.5kW PV

SPZ HI-15KW-LV

10kW AC

15kW PV

SPZ HI-18KW-LV

12kW AC

18kW PV

SPZ HI-24KW-LV

16kW AC

24kW PV



Empowering Your Solar Solutions

Spitzer Energy Hybrid Inverters (Split-Phase)

Spitzer Energy's Hybrid Inverter works with solar, batteries, the grid, and external generators. We support grid-tied solar, battery supported utility rate reduction, and emergency back-up options including on-grid and off-grid solutions.

Key Features

Friendly & Flexible

- Automatic self-consumption (solar, battery, grid)
- Time-of-use for utility rate reduction
- Grid tied (with or without battery)
- Emergency back-up (automatic transfer in case of power failure)
- Off grid capability
- Closed-loop battery management system
- Easy to set-up (includes monitoring App)

Powerful & Expandable

- 4 MPPT trackers
- Connects up to 3 inverters in parallel (24-30kW AC)
- Connect up to 40kWh of LifePo4 batteries
- 190-210 Amp pass-through (charge/discharge)

Safe & Reliable

- Standard Warranty (10 yrs) Extended (20 yrs)
- Passed UL1699B, IEEE1547, CPUC Rule21, SRD V2.0, UL1741 SA, UL1741 SB, CEC, 9540A



Technical Specifications

Spitzer Energy Hybrid Inverters (Split-Phase)

Technical specification	SPZ HI-7.5KW-LV	SPZ HI-15KW-LV	SPZ HI-18KW-LV	SPZ HI-24KW-LV
AC output				
Rated output power (kVA)	5	10	12	16
Max. apparent Power (kVA)	5.5	11	13.2	17.6
Max. output current (A)	20.8	41.7	50	66.7
AC output voltage (V)	(110-120)/(220-240) split phase, (240V) single phase			
Frequency (Hz)	60 (55 to 65)			
Max. AC current output to grid (A)	22.9	45.8	55	73.3
Max. grid passthrough current (A)	100			
THDi	<3%			
Input (PV)				
Max. power (kW)	7.5	15	18	24
Max. DC voltage (V)	500			
MPPT voltage range (V)	120-500		120~500 / 120~430	
Max. Input current of single MPPT (A)	14		16/16/16/16 20/26/20/26	
Max. short circuit current (A)	22		22 22A/34A/22A/34A	
MPPT tracker/strings	4			
Battery				
Battery voltage range (V)	40-60		40-58	
Max. charging voltage (V)	48			
Max. charge/discharge current (A)	120/120	190/210	250/260	
Battery type	Lithium /Lead-acid			
Charging strategy for Li-on battery	Self-adaption to BMS		3-Stage with equalization	
EPS output				
Rated power (kVA)	5	10	12	16
Max apparent power (kVA)	5.5	11	13.2	17.6
Nominal output voltage L-N/L1-L2 (V)	120/240			
Rated frequency (Hz)	60			
Automatic switching time (ms)	<20			
THDu	<2%			
Output power factor	0.8 leading ~ 0.8 lagging			
General data				
MPPT efficiency	99.9%		99.9%	
Europe efficiency (PV)	96.5%		96.2%	
PV to grid efficiency (PV)	97.2%		96.5%	
Battery to load efficiency	95.2%		94.6%	
PV to battery charging efficiency	96.1%		95.8%	
Grid to battery charging efficiency	95.0%		94.5%	
Output conduit (mm)	25.4			
PV input conduit (mm)	25.4			
BAT input conduit (mm)	35.4			
Operating temperature range (°F)	-13°F ~ 140°F			
Relative humidity	0-95%			
Operating altitude	0~4,000m(Derating above 2,000m altitude)			
Ingress protection	IP65/NEMA 3R			
Built-in breaker	Optional			
Weight (lb)	105.82 lbs (110.23 lbs with breaker)		116.84 lbs (123.46 lbs with breaker)	
Dimensions W*H*D (inch)	17.7 x 32.3 x 9.4		19.5 x 35.4 x 10.25	
Cooling	Fan cooling			
Noise emission (dB)	38			
Display	LCD,Touch panel(optinal)			
Communication with BMS/Meter/EMS	RS485, CAN			
Supported communication interface	RS485, WLAN, 4G (optional)			
Self-consumption	<25W			

Dimensions

Spitzer Energy Hybrid Inverters (Split-Phase)

Technical specification	SPZ HI-7.5KW-LV	SPZ HI-15KW-LV	SPZ HI-18KW-LV	SPZ HI-24KW-LV
General data				
Safety	UL1741SA all options, UL1699B, CSA 22.2		UL1741, UL9540, CEC, UL1741SA&SB all options, UL1699B, CSA - C22.2 NO.107.1-01, RSD (NEC690.5,11,12)	
EMC	FCC part 15 class B			
Support diesel generator	Yes			
Grid connection standards	IEEE 1547, IEEE 2030.5, Hawaii rule 14H, Rule 21 phase I,II,III		IEEE 1547, IEEE 2030.5, HECO Rule 14H, CA Rule 21 Phase I,II,III,CEC, CSIP,SRD2.0,SGIP,OGPe,NOM, California Prob65	
Peak power off (Off grid)	105%,60s / 110%,30s / 120%,10s / 150%,20ms		110%,30s / 120%,10s / 150%,5s	
Protection				
Grounding detection	Yes			
Arc fault protection	Yes			
Island protection	Yes			
Battery reverse polarity	Yes			
Insulation resistor detection	Yes			
Residual current monitoring unit	Yes			
Output over current protection	Yes			
Back-up output short protection	Yes			
Output over voltage protection	Yes			
Output under voltage protection	Yes			





SPZ 7.5KW-LV | 5KW AC | 7.5KW PV

SPZ 12KW-LV-B | 8KW AC | 12KW PV

SPZ 15KW-LV | 10KW AC | 15KW PV



Empowering Your Solar Solutions

Spitzer Energy Hybrid Inverters (Split-Phase)

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Key Features

Friendly & Flexible

- Automatic self-consumption (solar, battery, grid)
- Time-of-use for utility rate reduction
- Grid tied (with or without battery)
- Emergency back-up (automatic transfer in case of power failure)
- Off grid capability
- Closed-loop battery management system
- Easy to set-up (includes monitoring App)

Powerful & Expandable

- 2 MPPT/3 MPPT with 4 strings/6 strings
- Connects up to 3 inverters in parallel (24-30kW AC)
- Connect up to 40kWh of LifePo4 batteries
- 190-210 Amp pass-through (charge/discharge)

Safe & Reliable

- Standard Warranty (10 yrs) Extended (20 yrs)
- Passed UL1699B, IEEE1547, CPUC Rule21, SRD V2.0, UL1741 SA, UL1741 SB, CEC, 9540A



Technical Specifications

Spitzer Energy Storage Hybrid Inverters (Split-Phase)

Technical specification	SPZ 7.5KW-LV	SPZ 12KW-LV-B	SPZ 15KW-LV
AC output			
Rated output power (kVA)	5,000W	8,000W	10,000W
Max. apparent Power (kVA)	5,500VA	8,800VA	11,000VA
Max. output current (A)	25	40	50
Ac output voltage (V)	120/240(split phase), 208(2/3 phase), 230 (single phase)		
Frequency (Hz)	60		
PF	>0.99 @ rated power (adjustable 0.8 LD-0.8 LG)		
THDi	<3%		
Input (PV)			
Max. power (kW)	7,500W	12,000W	15,000W
Max. DC voltage (V)	600		
MPPT voltage range (V)	70-540		
Max. Input current of single MPPT (A)	30A/22A	30A/22A/22A	30A/22A/22A
Max. short circuit current (A)	40A/30A	40A/30A/30A	40A/30A/30A
Nos. of MPPT	2	3	3
MPPT tracker/strings	4 strings	6 strings	6 strings
Battery			
Nominal battery voltage (V)	48V		
Battery voltage range (V)	40V-64V		
Max. charge/discharge current (A)	210A/130A	210A/180A	210A/210A
Max. charge/discharge power (W)	10,000W/5,000W	10,000W/8,000W	10,000W/10,000W
Battery type	Lithium-ion /Lead-acid		
Output (Back-up)			
Nominal output power (W)	5,000W	8,000W	10,000W
Nominal output current (A)	20.9A	33.4A	41.7A
Peak power (1s)	10,000VA	16,000VA	20,000VA
Nominal output voltage (V)	120/240(split phase), 208(2/3 phase), 230 (single phase)		
Nominal output frequency (Hz)	60Hz		
Transfer time	10ms		
THDV	<3% @ 100 R load		
General data			
Max. efficiency (PV to AC)	98%		
Max. efficiency (BAT to AC)	94.5%		
CEC efficiency	97%		
Ingress protection	IP65		
Operation temperature (°F)	-13°F ~ 149°F (>113°F Derating)		
Cooling	Fan air		
Relative humidity	0 ~100%		
Operation altitude (m)	2,000		
Dimensions W *D *H	16.54" x 1.5" x 9.45"		
Weight (lb)	81.57 lbs		
HMI & COM / Certification			
Display	LED + App		
RS485/Can (for BMS), DRM/RS485 (for Meter), RS485 Optional: Wi-Fi/GPRS/LAN			
Safety standard	UL1741, UL9540, CEC, CSA C22.2, UL1699B		
EMC	FCC Part 15, Class B		
On-grid	UL1741 SB, IEEE1547:2018, HECO SRD 2.0, UL9540, CEC		
Warranty	5 years (Standard) / 10 years (Optional)		

Technical Specifications

Spitzer Energy Storage Hybrid Inverters (Split-Phase)

Protection	SPZ 7.5KW-LV	SPZ 12KW-LV-B	SPZ 15KW-LV
AC output			
Protection category		Class I	
DC switch		Yes	
Anti-islanding protection		Yes	
AC over current protection		Yes	
AC over voltage protection		Yes	
DC reverse protection		Yes	
Surge arrester		DC Type II, AC Type II	
Insulation detection		Yes	
Leakge current protection		Yes	
AFCI		Yes	
RSD		Support (MLRSD Sunspec)	

Dimensions

Spitzer Energy Hybrid Inverters





| Modular / Wall Mount Battery



SPZ 5.12KWH-MOD/MW | (5.12 kWh) Expandable



MODULAR / WALL MOUNT BATTERY

Affordable, cutting-edge technology for comprehensive solar energy solutions. From Residential peak-shifting to emergency Commercial backup, Spitzer has you covered.

Key Features

Safe & Reliable

- CATL LFP Cells Inside
- Supports Charging Down to 23°F
- Warranty: 10 Years (Optional extended warranty)

Friendly & Flexible

- Easy installation, slim & modern design
- Parallel capacity up to 160 kWh
- Advanced BMS control
- Remote monitoring with over-the-air updates (optional)

Economical & Efficient

- Automatic Parallel Configuration
- Indoor Application (IP20)
- Emergency Backup system to securely power your home even when the power is out
- Compatible with wide range of inverters

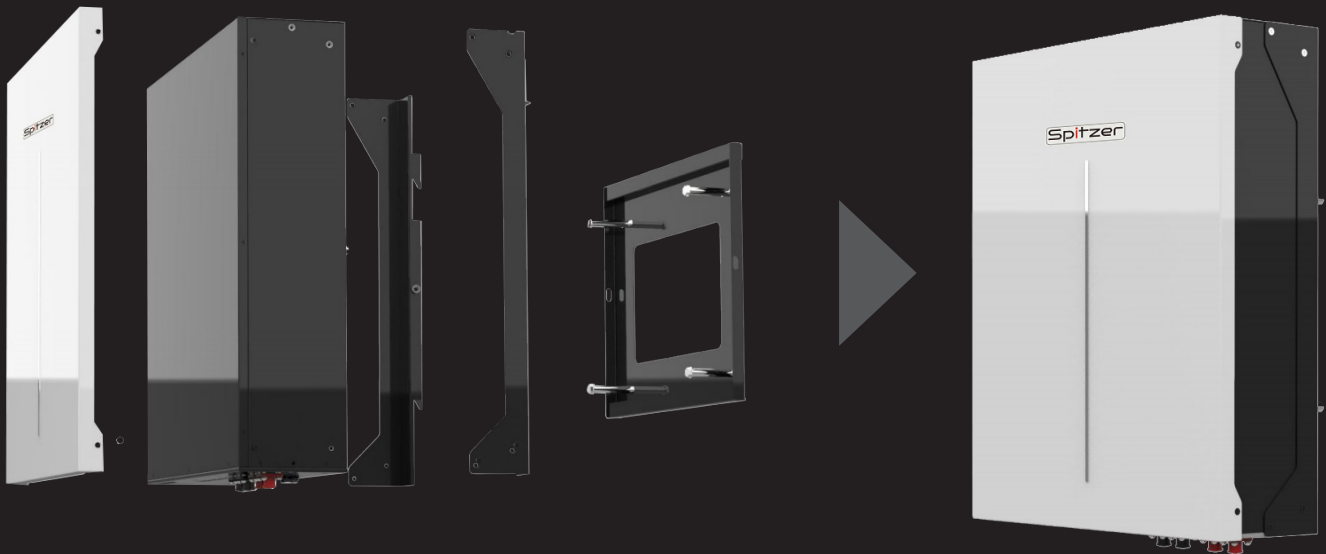
Technical Specifications

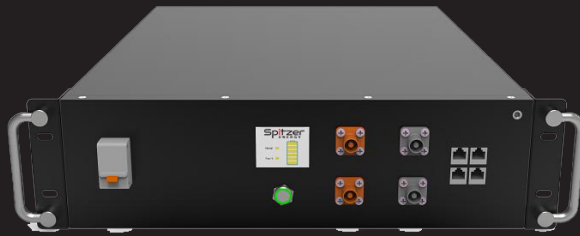
Technical specification	SPZ5.12KWH-MOD/WM
General	
Battery Size	5.12kWh(100Ah)
Cell Type	CATL LFP cells
Voltage Range	51.2V
Maximum Continuous Charge/Discharge Rate	2.56kW/5.12kW
Peak Current	100A
Rated Charging/Discharge Current	0.6C, 120 A
Communication Protocol	CAN / RS485 / Dry Contact / WiFi
Cycle Life	≥6000cycle
Available SOC Range	0% ~ 100% (90% DOD is recommended)
Maximum Parallel	Max. 32 Sets in Parallel, 163.84 kWh
IP Rating	IP20 (Indoor)
Certificates	UN38.3/UL1973/UL9540A/UL9540/CEC
Warranty	Warranty: 10 Years (Optional extended warranty)
Package	
Unit Dimension (L*W*H)	17.32 * 20.9 * 5.2 inch
Unit Weight	98.11 lbs
Operating Temperature	Charging Temp: 32°F ~ 131°F/Discharge Temp: 5°F ~ 131°F
Storage Temperature	1 - 3 months: -4°F ~ 122°F/3 - 12 months: 50°F ~ 86°F
Working Humidity	5 ~ 95% RH (Non-Condensing)

SPZ 5.12KWH-MOD/WM - Wall Mount Battery



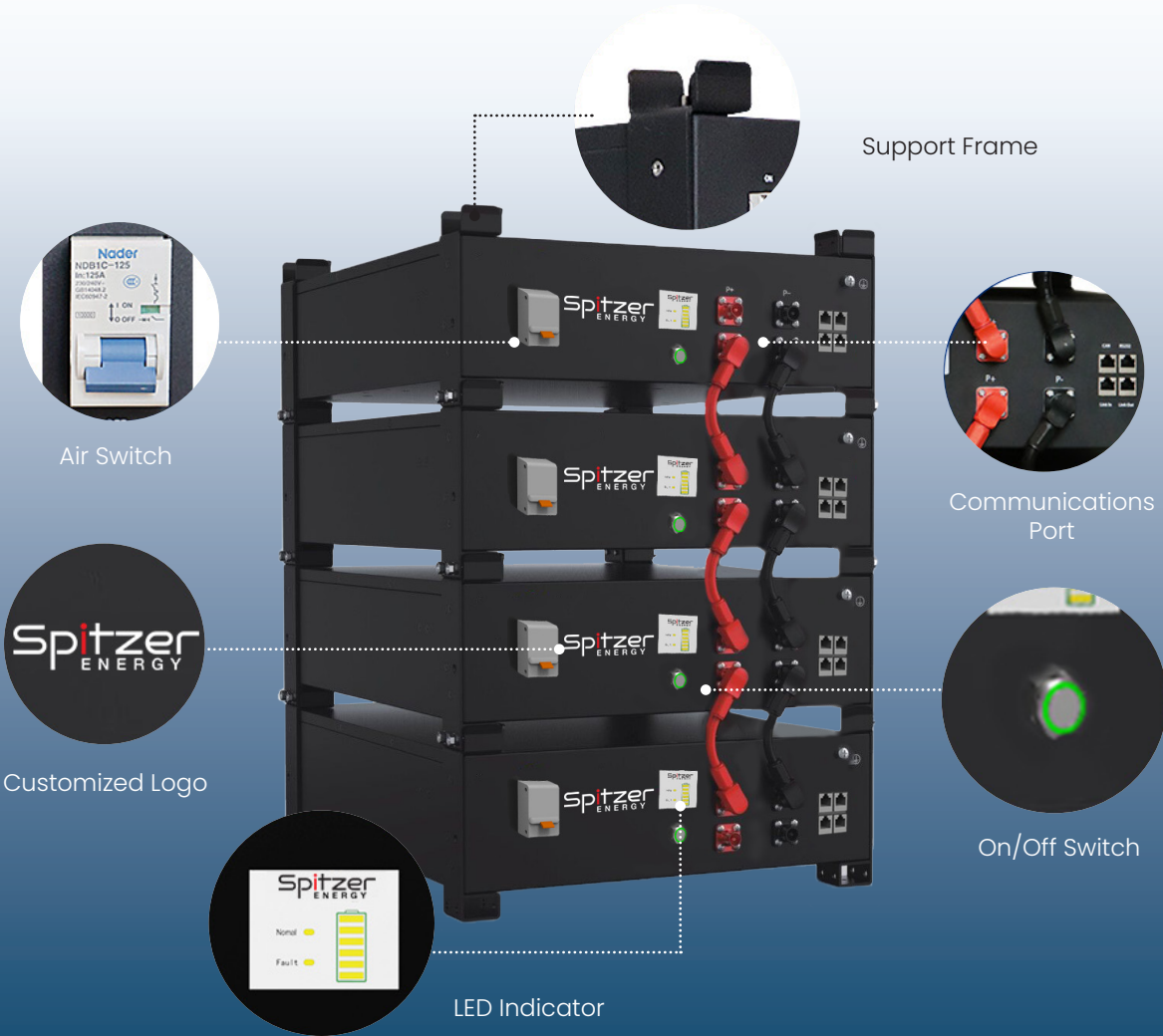
SPZ 5.12KWH-MOD/WM - Wall Mount Battery





LV-BAT-R5.12AB | (5.12 100Ah 5kWh) Expandable

3U Modular LiFePO4 Battery



MODULAR BATTERY

Affordable, cutting-edge technology for comprehensive solar energy solutions. From Residential peak-shifting to emergency Commercial backup, Spitzer has you covered.

Key Features

3U Design

Applicable for cabinet telecom and solar energy storage system

Flexible Capacity

Max.15pcs in Parallel to extend capacity

Safe & Reliable

Lithium Iron Phosphate (LFP) Cell

LED Display

SOC, Battery Status

Easy Installation

Quick plug in +/- and RS485 parallel connection

Certificates

ETL UL1973, ETL UL9540A, UL9540, CEC

Technical Specifications

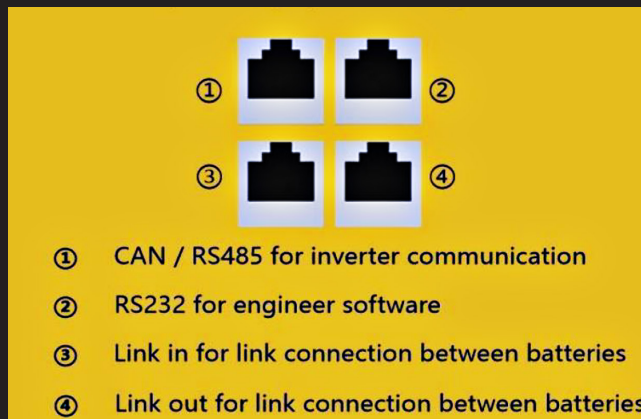
Technical specification	LV-BAT-R5.12AB
General	
Model	LV-BAT-R5.12Ab
Nominal Voltage	51.2V
Rated Capacity	100Ah
Energy	5120Wh
Battery Impedance	≤ 50 mΩ
Charging Cut-off Voltage	56.16 V
Discharge Cut-off Voltage	45.6 V
Recommend Charge Current	0.2 C 20 A
Max. Charge Current	32 ~ 59°F: 20A; 59~ 113°F: 50A;
Max Continue Discharge Current	125 A, -4°F~140°F ; 65±20%RH
Operating Temperature Range	-4~140°F
Storage Environment (50% state of charge)	68F~ 113F in three months; 77±37.4F over three months; Humidity:65±20%RH
Environment	Indoor
Installation	Rack Mount
Cell Technology	Lithium-iron phosphate (LiFePO4)
Life Cycle	6000 times @80%DOD
Cooling	Natural cooling
Protection Rating	IP20
Certificates	ETL UL1973, ETL UL9540A, UL9540, CEC

Technical Specifications

Technical specification	LV-BAT-R5.12AB
Dimension and Weight	
Dimension	21.65*17.32*5.12in(3U)
Battery Net Weight (Approx.)	103.48IBS



Communication Instruction	
RS232	Only for debugging, BMS can communicate with the host computer through the RS232 interface, so that various information of the battery can be monitored through the host computer, including battery voltage, current, temperature, status and battery production information, etc. The default baud rate is 9600bps.
CAN	For monitoring battery status, with isolated CAN communication, the default communication rate is 500K.
RS485	RS485 is used in parallel, with dual RS485 interfaces, can view the PACK information, the default baud rate is 9600bps.





SPZ 5.12KWH-MD | (5.12 kWh) Expandable



MODULAR BATTERY

Affordable, cutting-edge technology for comprehensive solar energy solutions. From Residential peak-shifting to emergency Commercial backup, Spitzer has you covered.

Key Features

Safe & Reliable

- Reliable Lithium iron phosphate battery technology
- Rigorously tested, UL 1973, UL 9540, UL9540A.
- Warranty: 10 Years (Optional extended warranty)

Friendly & Flexible

- Modular and Stackable Battery System Expandable up to 280 KWh.
- DC and AC Compatible Solution for interconnectivity with new and existing solar systems.

Economical & Efficient

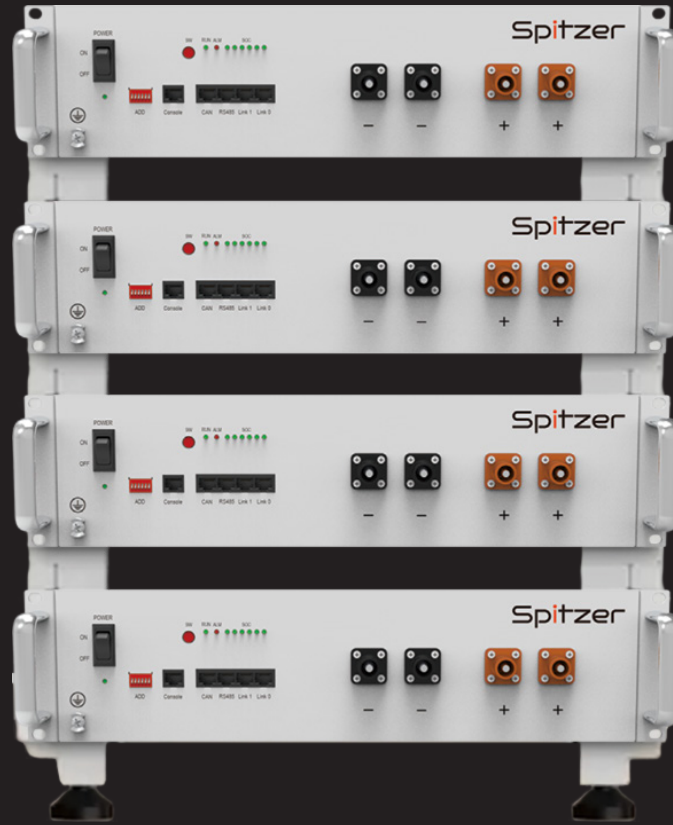
- Self-Consumption: so you can fully use your own PV energy.
- Savings Optimization to avoid peak time-of-use rates (TOU).
- Emergency Backup system to securely power your home even when the power is out.

Technical Specifications

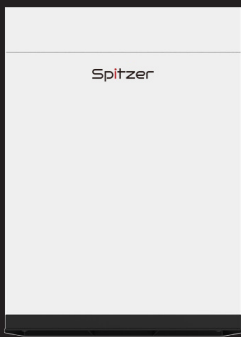
Technical specification	SPZ 5.12KWH-MD
General	
Battery Size	5.12kWh(100Ah)
Cell Type	Lithium Iron Phosphate (LiFePo4)
Voltage Range	47.5V-58V
Maximum Continuous Charge/Discharge Rate	50A (2.56kW DC)
Peak Discharge Rate	102A (5.22kW@15s)
Round-Trip Efficiency	≥95%
Communication Protocol	RS232, RS485, CAN
Cycle Life	≥6000cycle
AC output topology	Split phase, 2/3 phase, single phase
Maximum Allowed Modules in One Parallel	8 pcs (41kWh)
Maximum Parallel	6 Groups (245.76kWh) in a system w/a Hub
Max. Input current of single MPPT(A)	14
Certificates	UL9540, UL9540A, UL1973, SGIP, CEC
Package	
Unit Dimension (L*W*H)	17.32 * 24.41 * 4.61 inch
Unit Weight	112.5 lbs
Storage Temperature	<1month: -4°F ~ 131°F 1-3months: 32°F ~95°F 3-12months: 68°F~77°F



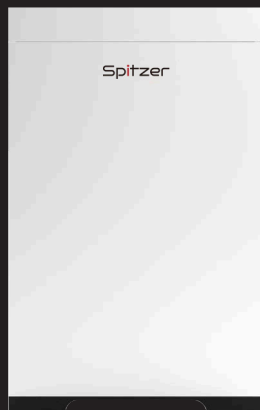
SPZ-5.12KWH-MD - Modular Battery



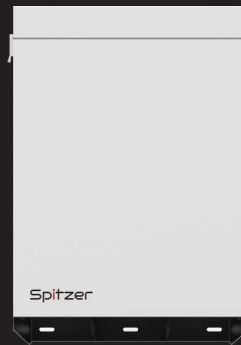
Enclosure Options (Sold separately)



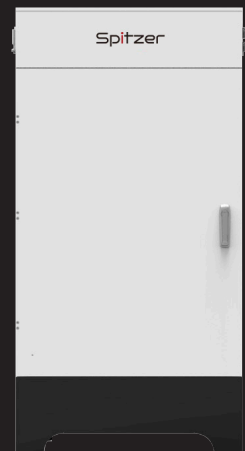
IP20-2 Wall Mount



IP20-6 Floor Mount



IP64-2 Wall Mount



IP55-4 Floor Mount



| Wall-Mount Battery



SPZ 10.24KWH-WM | (10.24 kWh) Expandable



Empowering Your Solar Solutions

WALL MOUNT BATTERY

Affordable, cutting-edge technology for comprehensive solar energy solutions. From Residential peak-shifting to emergency Commercial backup, Spitzer has you covered.

Key Features

Safe & Reliable

- CATL LFP Cells Inside
- Supports Charging Down to 5°F~131°F
- Warranty: 10 Years (Optional extended warranty)

Friendly & Flexible

- Easy installation, slim & modern design
- Parallel capacity up to 160 kWh
- Advanced BMS control
- Remote monitoring with over-the-air updates (optional)

Economical & Efficient

- Automatic Parallel Configuration
- Outdoor and Indoor Application (IP65)
- Emergency Backup system to securely power your home even when the power is out
- Compatible with wide range of inverters



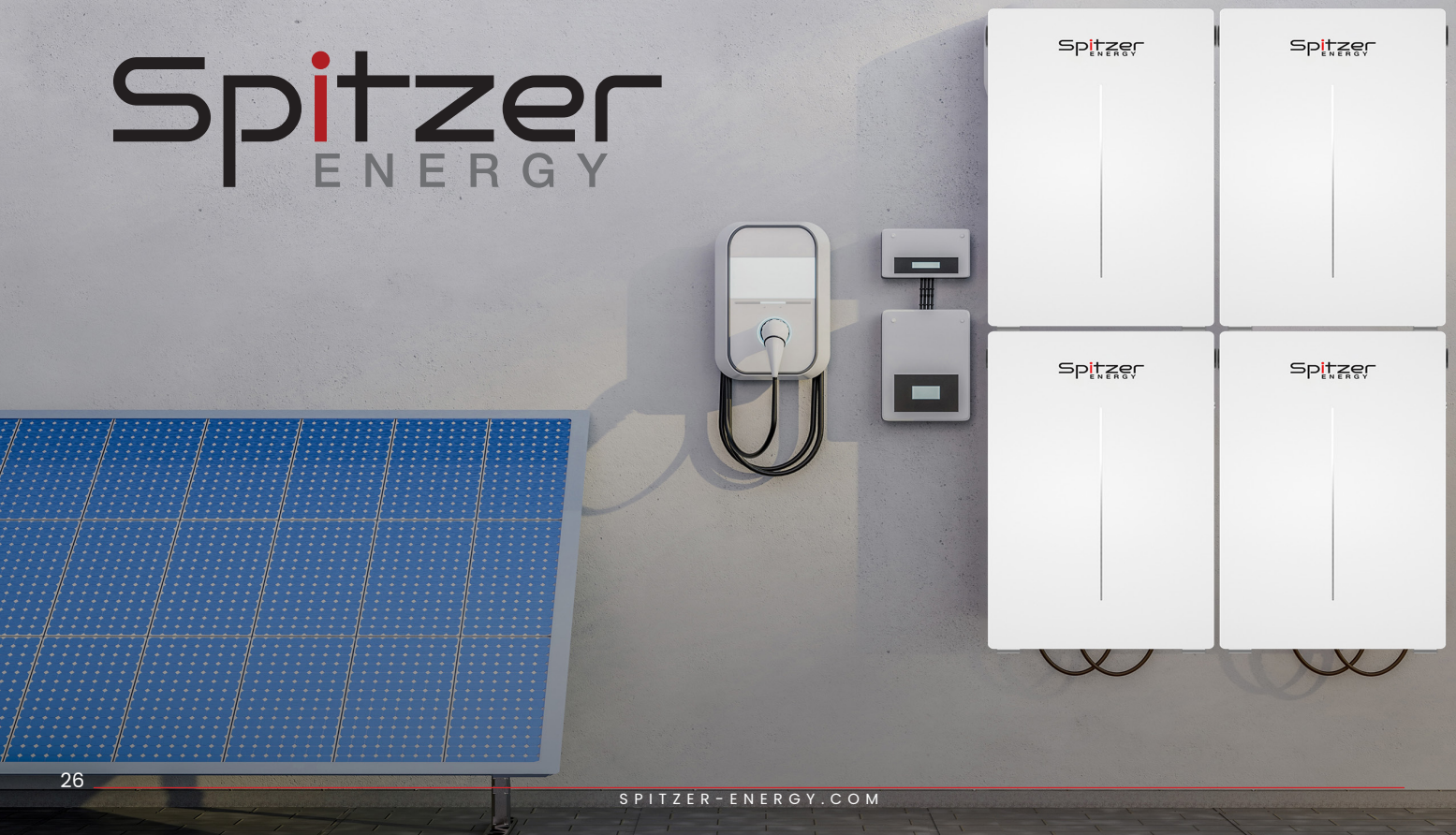
Technical Specifications

Spitzer Energy Wall Mount Storage Battery

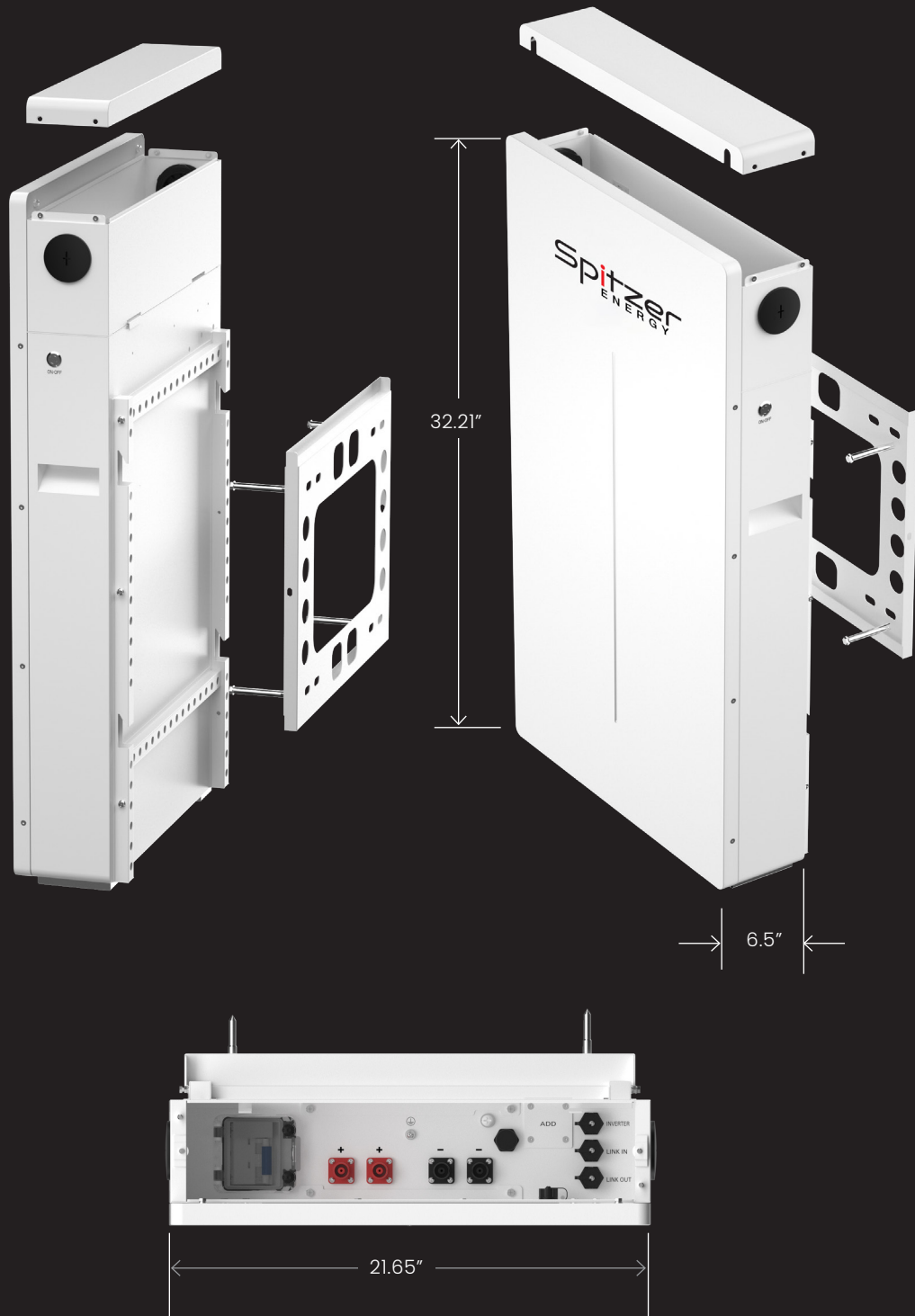
Technical specification	SPZ 10.24KWH-WM
General	
Battery Size	10.24kWh(200Ah)
Cell Type	CATL LFP cells
Voltage Range	51.2V
Max. Continuous Charge/Discharge Rate	6.14kW
Peak Discharge Rate	160A (8.19kW@1 min)
Rated Charging/Discharge Current	0.6C, 120 A
Communication Protocol	CAN / RS485 / Dry Contact / WiFi
Cycle Life	≥6000cycle
Available SOC Range	0% ~ 100% (90% DOD is recommended)
Maximum Parallel	16 Sets in Parallel, 163.84 kWh
IP Rating	IP65
Certificates	TÜV/IEC 62619/IEC 62040/IEC 61000/UN38.3/UL/RoHS/CSA/REACH/UL1973/UL9540a/UL9540/CEC
Warranty	Warranty: 10 Years (Optional extended warranty)
Package	
Unit Dimension (L*W*H)	21.65 * 32.21 * 6.5 inch
Unit Weight	207 lbs
Operating Temperature	1 month: -4°F ~ 131°F/1 - 3 months: 32°F ~ 95°F/3 - 12 months: 68°F ~ 77°F
Storage Temperature	5°F ~ 131°F
Working Humidity	5 ~ 95% RH (Non-Condensing)



Spitzer
ENERGY



Dimensions





SPZ-M400-S | SPZ-M500-S

1 Solar Panel supported by 1 microinverter



Empowering Your Solar Solutions

1 Solar Panel supported by 1 microinverter

High-output microinverters harvest optimum power from high efficiency solar modules. Microinverters fit easily under solar panels with lower amperage wires, all with advanced reliability testing backed by a 25-year product warranty.

Key Features

Reliable

- Low-voltage operation below 60V (16-60V)
- IP67 degree of protection, adaptable to diverse climates

Efficient

- Higher output module-level MPPT, output power up to 500 VA
- 150% DC to AC ratio allows for solar oversizing producing higher output
- 20V low start-up voltage, starts earlier & shuts down later producing higher output

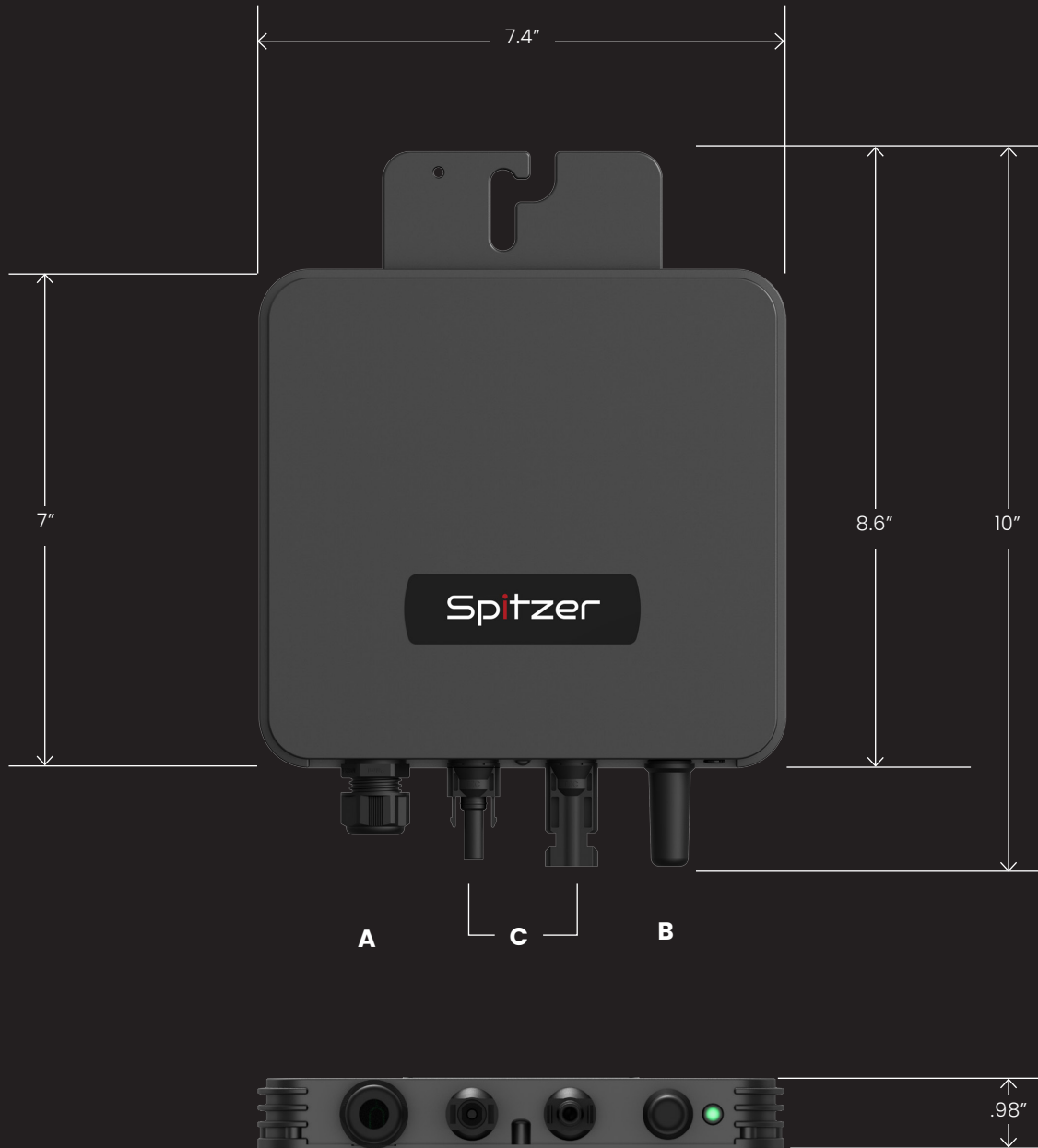
Intelligent

- Communication; Built-in WiFi or 4G
- Module-level monitoring through wireless App
- Remote software upgrade, parameter configuration, and alarm fault analysis

Simple

- Hook type design (quick-connect to panels)
- Fast installation with multiple length trunk cables
- Easy expansion system for a multiple array solar installation

Technical specification	SPZ-M400-S		SPZ-M500-S	
Input (DC)				
Commonly used module pairings (W)	320-600+		400-670+	
Operative Range (V)	16-60			
Max. Input DC voltage (V)	65			
Min. Start voltage (V)	20			
Max. continuous input DC current (A)	16			
Max. Short-circuit DC Input Current (A)	20			
Output (AC)				
Peak Output power (VA)	400		500	
Max. continuous output power (VA)	360		475	
Max. continuous output current (A)	1.5	1.7	2	2.3
Nominal (L-L) voltage (V)	240/211-264	208/183-228	240/211-264	208/183-228
Nominal Frequency (Hz)	60			
Extended frequency range	55-65			
Power factor setting	>0.99/0.8 leading...0.8lagging			
Total harmonic distortion	<3%			
Max. Units Per 10 AWG Branch	21	18	16	14
Efficiency				
Peak Efficiency	96.70%			
Nominal MPPT Efficiency	99.80%			
Night-time power consumption (mW)	<30			
General data				
Ambient Temperature Range (°F)	-40°F to 149°F			
Dimension (H*W*D)	7.4" x 7" x .98"			
Degree of Protection	Outdoor-IP67 (NEMA6)			
Cooling	Natural Cooling - No fans			
Weight (lb)	3.75 lbs			
Features				
Communication	Sub-1G, Built in WiFi			
Type of Isolation	High frequency transformers, Galvanically isolated			
Certifications	UL 1741, UL 1741 SB, CSA C22.2 No. 107.1-16 (Canada)			
Warranty	12 years standard, 25 years optional			
Protection				
Input Reverse Connection Protection	YES			
Output Overcurrent Protection	YES			
Output Overvoltage Protection	YES			
Anti-islanding Protection	YES			
Surge Protection	Type II			



A: AC Branch Connector | B: Antenna | C: DC Terminal



SPZ-M800-S | SPZ-M1000-S

2 Solar Panel supported by 1 microinverter



2 Solar Panel supported by 1 microinverter

High-output microinverters harvest optimum power from high efficiency solar modules. Microinverters fit easily under solar panels with lower amperage wires, all with advanced reliability testing backed by a 25-year product warranty.

Key Features

Reliable

- Low-voltage operation below 60V (16-60V)
- IP67 degree of protection, adaptable to diverse climates

Efficient

- Higher output module-level MPPT, output power up to 1000 VA
- 150% DC to AC ratio allows for solar oversizing producing higher output
- 20V low start-up voltage, starts earlier & shuts down later producing higher output

Intelligent

- Communication; Built-in WiFi or 4G
- Module-level monitoring through wireless App
- Remote software upgrade, parameter configuration, and alarm fault analysis

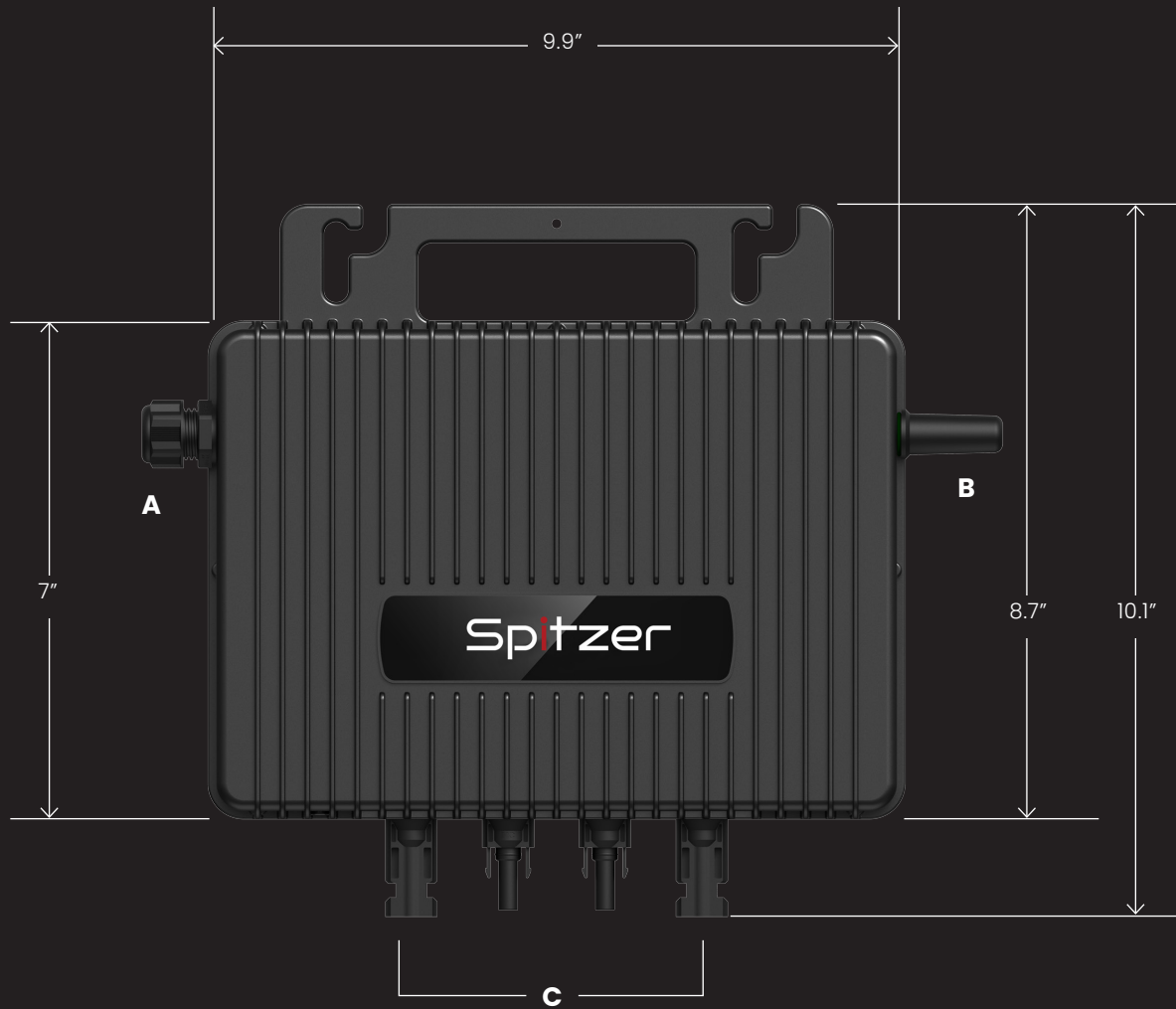
Simple

- Hook type design (quick-connect to panels)
- Fast installation with multiple length trunk cables
- Easy expansion system for a multiple array solar installation

Technical specification	SPZ-M800-S		SPZ-M1000-S	
Input (DC)				
Commonly used module pairings (W)	320-600+		400-670+	
Operative Range (V)	16-60			
Max. Input DC voltage (V)	65			
Min. Start voltage (V)	20			
Max. continuous input DC current (A)	2*16			
Max. Short-circuit DC Input Current (A)	2*20			
Output (AC)				
Peak Output power (VA)	800		1,000	
Max. continuous output power (VA)	720		960	
Max. continuous output current (A)	3	3.5	4	4.6
Nominal (L-L) voltage (V)	240/211-264	208/183-228	240/211-264	208/183-228
Nominal Frequency (Hz)	60			
Extended frequency range	55-65			
Power factor setting	>0.99/0.8 leading...0.8lagging			
Total harmonic distortion	<3%			
Max. Units Per 10 AWG Branch	10	9	8	6
Efficiency				
Peak Efficiency	96.70%			
Nominal MPPT Efficiency	99.80%			
Night-time power consumption (mW)	<30			
General data				
Ambient Temperature Range (°F)	-40°F to 149°F			
Dimension (H*W*D)	9.9" x 7" x 1.38"			
Degree of Protection	Outdoor-IP67 (NEMA6)			
Cooling	Natural Cooling - No fans			
Weight (lb)	6.61 lbs			
Features				
Communication	Sub-1G, Built in WiFi			
Type of Isolation	High frequency transformers, Galvanically isolated			
Certifications	UL 1741, UL 1741 SB, CSA C22.2 No. 107.1-16 (Canada)			
Warranty	12 years standard, 25 years optional			
Protection				
Input Reverse Connection Protection	YES			
Output Overcurrent Protection	YES			
Output Overvoltage Protection	YES			
Anti-islanding Protection	YES			
Surge Protection	Type II			

Dimensions

Spitzer Energy 2 in 1 Microinverter



A: AC Branch Connector | B: Antenna | C: DC Terminal



SPZ-M1800-S | SPZ-M2000-S

4 Solar Panel supported by 1 microinverter



4 Solar Panel supported by 1 microinverter

High-output microinverters harvest optimum power from high efficiency solar modules. Microinverters fit easily under solar panels with lower amperage wires, all with advanced reliability testing backed by a 25-year product warranty.

Key Features

Reliable

- Low-voltage operation below 60V (16-60V)
- IP67 degree of protection, adaptable to diverse climates

Efficient

- Higher output module-level MPPT, output power up to 2000 VA
- 150% DC to AC ratio allows for solar oversizing producing higher output
- 20V low start-up voltage, starts earlier & shuts down later producing higher output

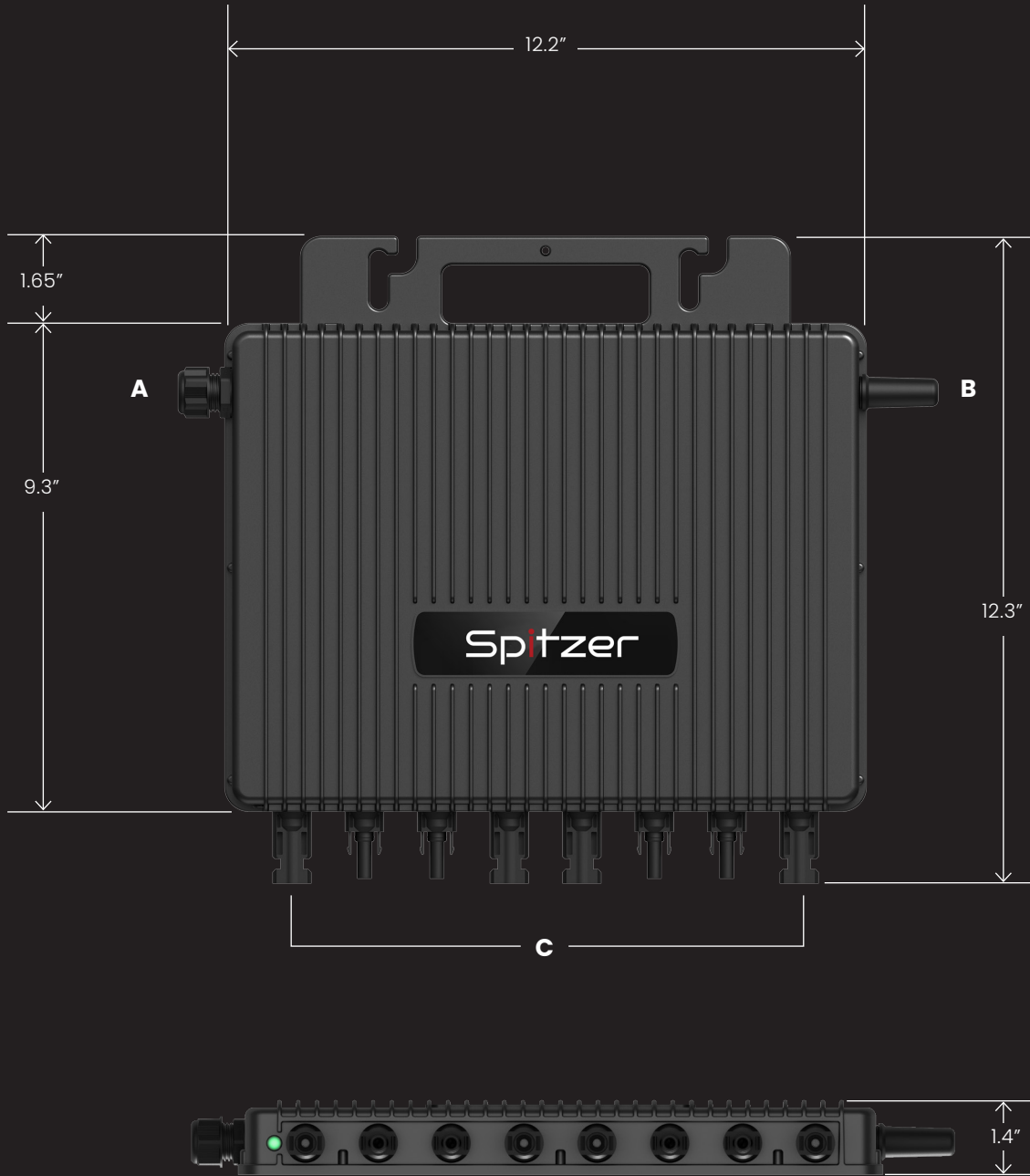
Intelligent

- Communication; Built-in WiFi or 4G
- Module-level monitoring through wireless App
- Remote software upgrade, parameter configuration, and alarm fault analysis

Simple

- Hook type design (quick-connect to panels)
- Fast installation with multiple length trunk cables
- Easy expansion system for a multiple array solar installation

Technical specification	SPZ-M1800-S		SPZ-M2000-S	
Input (DC)				
Commonly used module pairings (W)	320-600+		400-670+	
Operative Range (V)	16-60			
Max. Input DC voltage (V)	65			
Min. Start voltage (V)	20			
Max. continuous input DC current (A)	4*16			
Max. Short-circuit DC Input Current (A)	4*20			
Output (AC)				
Peak Output power (VA)	1,800		2,000	
Max. continuous output power (VA)	1,660		1,920	
Max. continuous output current (A)	6.9	8	8	9.2
Nominal (L-L) voltage (V)	240/211-264	208/183-228	240/211-264	208/183-228
Nominal Frequency (Hz)	60			
Extended frequency range	55-65			
Power factor setting	>0.99/0.8 leading...0.8lagging			
Total harmonic distortion	<3%			
Max. Units Per 10 AWG Branch	4	4	4	3
Efficiency				
Peak Efficiency	96.70%			
Nominal MPPT Efficiency	99.80%			
Night-time power consumption (mW)	<30			
General data				
Ambient Temperature Range (°F)	-40°F to 149°F			
Dimension (H*W*D)	12.2" x 9.29" x 1.4"			
Degree of Protection	Outdoor-IP67 (NEMA6)			
Cooling	Natural Cooling - No fans			
Weight (lb)	11			
Features				
Communication	Sub-1G, Built in WiFi			
Type of Isolation	High frequency transformers, Galvanically isolated			
Certifications	UL 1741, UL 1741 SB, CSA C22.2 No. 107.1-16 (Canada)			
Warranty	12 years standard, 25 years optional			
Protection				
Input Reverse Connection Protection	YES			
Output Overcurrent Protection	YES			
Output Overvoltage Protection	YES			
Anti-islanding Protection	YES			
Surge Protection	Type II			



A: AC Branch Connector | B: Antenna | C: DC Terminal



Data Management Unit

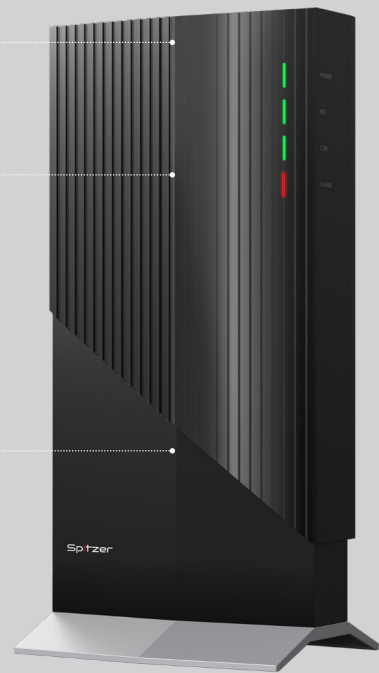
Easy to install
Plug-and-play, without additional wiring

Safe and reliable
Data transmission encryption ensuring data security

Local storage, breakpoint, resuming upload without data loss supportable

Intelligent O&M
Ethernet, WiFi, 4G multiple communications supportable

Remote software upgrade, parameter configuration, alarm fault analysis supportable



SPITZER Data Management Unit

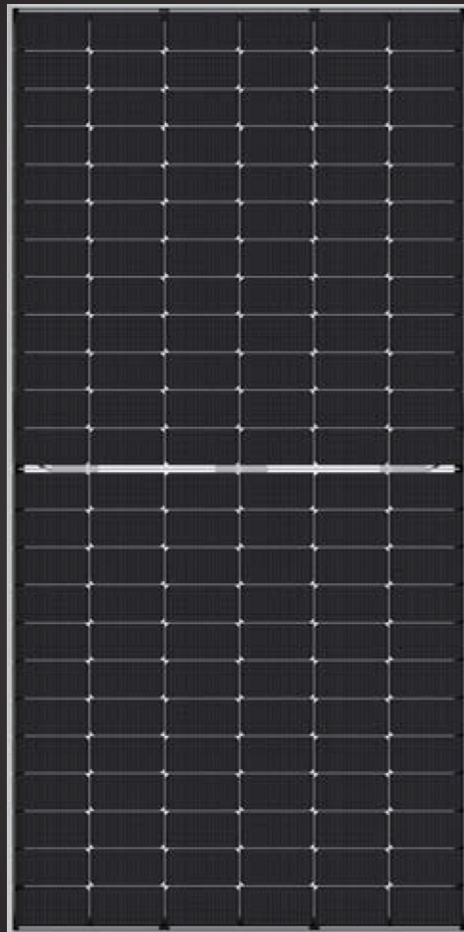
4G / WiFi

Data Management Unit

Technical specification	SPZ-DMU-W	SPZ-DMU-4G
Communication to Microinverter		
Signal	WIFI	4G
Monitoring Data Limit From Solar Panels	400	400
Communication to SPZ Cloud		
Ethernet	RJ45×1, 100Mbps	RJ45×1, 100Mbps
Wireless	WIFI:802.11b/g.n	4G:TDD-LTE,FDD-LTE 3G:SCDMA 2G:GSM/GPRS
Data Acquisition Interval	Default: 5 mins (1-15 mins Configurable)	
Power Supply (Adapter)		
Type	External adapter	
Adapter Input Voltage(V)/ frequency (Hz)	100 - 240AC/50-60	
Adapter Output Voltage(V)/ frequency (Hz)	12V / 1A	
Power Consumption (W)	1.5	2.5
General data		
Ambient Temperature Range (°F)	-4°F to 149°F	
Dimension (H*W*D)	4.17" x 8.5" x 3.11" (with base)	
Weight (lb)	0.71 lb	
Cooling	Natural Cooling	
Degree of Protection	IP20	
Installation Method	Desktop mounting / Wall mounting	



LIGHTNING SERIES



410W | 144 HALF CELL BI-FACIAL MODULE



RESIDENTIAL SOLAR PANEL

High Conversion Efficiency

Module efficiency up to 21.0% achieved through advanced cell technology and manufacturing process

Extended Mechanical Performance

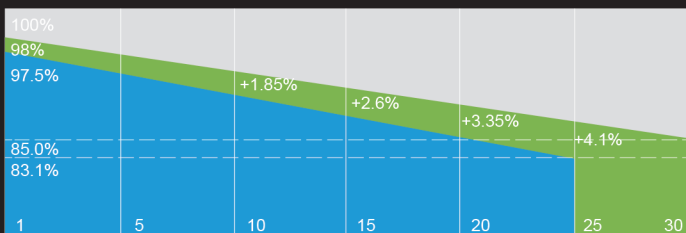
Module certified to withstand extreme wind (2400 Pa) and snow loading (5400 Pa)

Excellent Weak Light Performance

More power output in weak light condition such as cloudy morning and sunset

Quality Guarantee

High module quality ensures long-term reliability



■ Conventional power degradation

■ Spitzer power degradation



Warranty for materials and processing



Warranty for extra linear power output



Warranty partner

IEC61215 / IEC61730 / UL61730
IEC61701 / IEC62716 / IEC60068
ISO9001

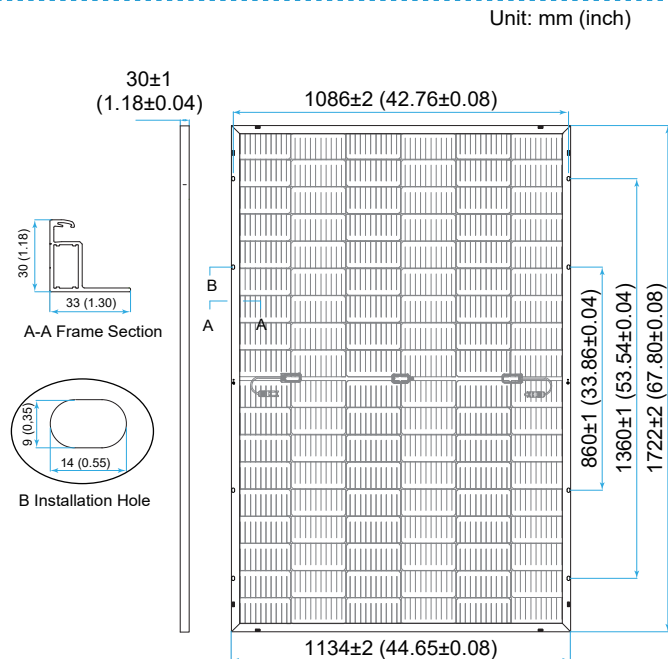
Mechanical Parameters

Solar Cell	Mono PERC 182mm
No. of Cells	108 (6 × 18)
Dimensions	1722 × 1134 × 30mm (67.08 × 44.65 × 1.18in.)
Weight	25.2kg (55.55lbs)
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4mm ² (IEC), 12 AWG (UL) (-/+)1200mm (47.24in.) or customized
Connector	EVO2 or similar
Front Cover	2.0mm (0.079in.) semi-tempered AR glass
Back Cover	2.0mm (0.079in.) semi-tempered glass
Container	36 pcs/Pallet, 792 pcs/40' HC

Operating Parameters

Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C (-40°F ~ +185°F)
Max. Fuse Rating	30A
Frontside Max. Loading	5400Pa (112lb/ft ²)
Backside Max. Loading	2400Pa (50lb/ft ²)
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

Engineering Drawing



Electrical Characteristics - STC

Irradiance 1000 W/m², ambient temperature 25 °C, AM1.5.

Maximum Power at STC (Pmax/W)	410	405	400	395	390
Power Tolerance (W)	0 ~ +5				
Optimum Operating Voltage (Vmp/V)	31.45	31.21	31.01	30.84	30.64
Optimum Operating Current (Imp/A)	13.04	12.98	12.90	12.81	12.73
Open Circuit Voltage (Voc/V)	37.32	37.23	37.07	36.98	36.85
Short Circuit Current (Isc/A)	13.95	13.87	13.79	13.70	13.61
Module Efficiency	21.0%	20.7%	20.5%	20.2%	20.0%

Electrical Characteristics - NMOT

Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.

Maximum Power at NMOT (Pmax/W)	310.2	306.4	302.5	298.8	295.0
Optimum Operating Voltage (Vmp/V)	29.82	29.60	29.41	29.25	29.06
Optimum Operating Current (Imp/A)	10.40	10.35	10.29	10.22	10.15
Open Circuit Voltage (Voc/V)	35.39	35.31	35.15	35.07	34.95
Short Circuit Current (Isc/A)	11.25	11.19	11.13	11.05	10.98

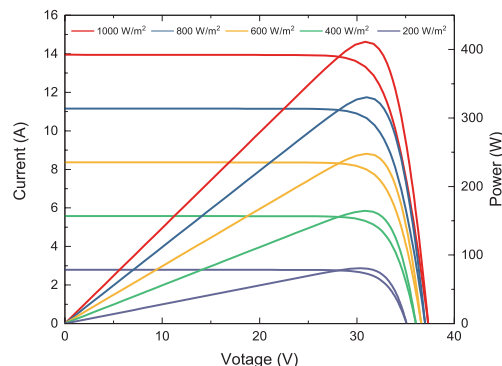
Rearside Power Gain (Reference to 410W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	431	472	513
Optimum Operating Voltage (Vmp/V)	31.45	31.55	31.55
Optimum Operating Current (Imp/A)	13.69	14.94	16.24
Open Circuit Voltage (Voc/V)	37.32	37.42	37.42
Short Circuit Current (Isc/A)	14.65	16.00	17.39
Module Efficiency	22.1%	24.2%	26.3%

Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.35%/°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.05%/°C

Current-Voltage & Power-Voltage Curve (410W)

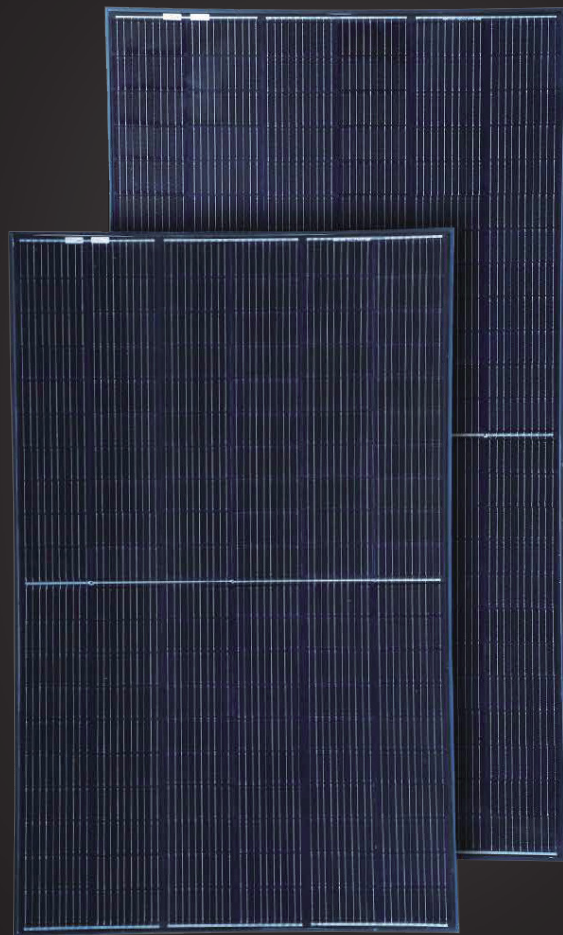


Spitzer
ENERGY

RESIDENTIAL SOLAR PANEL



LIGHTNING SERIES



440W | 144 CUT CELL BLACK BACK SHEET MODULE

440W | 120 CUT CELL BLACK BACK SHEET MODULE



RESIDENTIAL SOLAR PANEL

MONO-FACIAL MODULE

Positive power tolerance +5W

- Half Cut Cell Technology
- Best Warranty
- 10BB instead of 5BB
- Enhanced Mechanical Load
- Higher lifetime Power Yield
- Multi Busbar Technology
- Longer Life-time Power Yield
- PID Resistance
- Excellent Low-light Performance
- Higher Power Output

Features

- AR Coated High Transmission Glass
- MC4Compatible Connectors
- PID Resistance
- Anodised Aluminum Frame
- Mechanical Load of 5400Pa

Benefits

- Low LCOE. Faster Payback Period
- Best in Class Efficiency Up to 215%
- Multi-Bus Bar Technology for better current collection
- Lowest Guaranteed First Year and Annual Degradation
- Well-Composed Components Stress to reduce Micro Cracks



Product Warranty



Performance Warranty

TECHNICAL SPECIFICATION

Electrical data at 1000W/m², 25°C and A.M 1.5(STC in accordance with IEC 60904-3)

MODEL NAME	E530HCM144-B	E535HCM144-B	E540HCM144-B
RATED POWER AT STC	530	535	540
POWER TOLERANCE	+5W	+5W	+5W
MODULE EFFICIENCY AT STC	20.52%	20.71%	20.90%
OPEN CIRCUIT VOLTAGE - VOC(VOLTS) (±10%)	49.2	49.35	49.5
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.56	13.59	13.62
MAX POWER VOLTAGE - VPM (VOLTS)	41.1	41.32	41.54
MAX POWER CURRENT - IPM (AMPS)	12.9	12.95	13

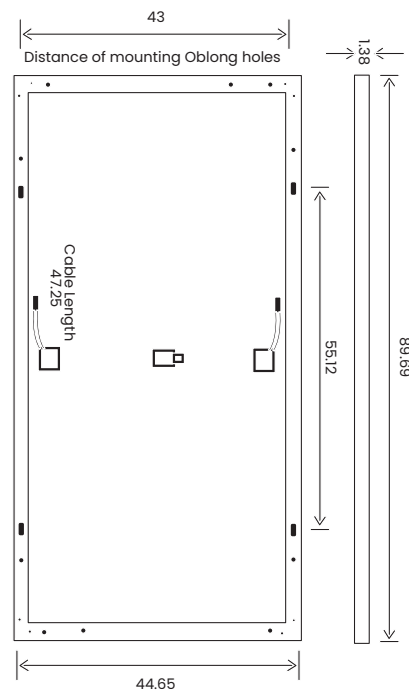
AT LOW IRRADIANCE (200W/M², 25°C AND AM1.5) THE MODULE YIELDS AT LEAST 95% OF THE STC EFFICIENCY.

Thermal data

TEMPERATURE COEFFICIENT OPEN-CIRCUIT VOLTAGE	-0.28%/°C
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	0.05%/°C
TEMPERATURE COEFFICIENT RATED POWER	-0.35%/°C
NOCT (NORMAL OPERATING CELL TEMPERATURE)	45°C ± 2°C
OPEN CIRCUIT VOLTAGE - VOC(VOLTS) (±10%)	49.2
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.56
MAX POWER VOLTAGE - VPM (VOLTS)	41.1
MAX POWER CURRENT - IPM (AMPS)	12.9

Mechanical data

NUMBER OF CELLS AND CELL TYPE	144 MONO PERC SOLAR CELLS (182mm X 91mm)
DIMENSIONS: (L X W X H)	89.69 inch X 44.65 inch X 1.38 inch
WEIGHT	57.32 Pounds
FRONT GLASS	3.2 mm HIGH TRANSMISSION, SOLAR GLASS
EMBEDDING	EVA
BACK SHEET	BLACK BACK SHEET
JUNCTION BOX	3 SPLIT JUNCTION BOX IP68
NUMBER OF BYPASS DIODES	3
CABLES	4mm ² SOLAR CABLES, LENGTH 1200±10mm
CONNECTORS	MULTI CONTACT OR STAUBLI OPTION AVAILABLE



Permissible operating conditions

OPERATING TEMPERATURE RANGE	-40°C TO 85°C
MAX.SYSTEM VOLTAGE	1500V DC
MAXIMUM SNOW LOAD CAPACITY	5400PA
RESISTANCE AGAINST HAIL	MAX Ø24 mm WITH IMPACT SPEED OF 83KM/H
PROTECTION CLASS AGAINST ELECTRICAL SHOCK	II
MAXIMUM REVERSE CURRENT	25 A

Warranty

PRODUCT WARRANTY	12 YEARS
PERFORMANCE WARRANTY	25 YEARS
ANNUAL DEGRADATION	1 ST YEAR DEGRADATION, 2%, FROM 2ND YEAR 0.55% ANNUAL DEGRADATION.*



TECHNICAL SPECIFICATION

Electrical data at 1000W/m², 25°C and A.M 1.5 (STC in accordance with IEC 60904-3)

MODEL NAME	E440HCM120-B	E445HCM120-B	E450HCM120-B
RATED POWER AT STC	440	445	450
POWER TOLERANCE	+5W	+5W	+5W
MODULE EFFICIENCY AT STC	20.28%	20.51%	20.74%
OPEN CIRCUIT VOLTAGE - VOC (VOLTS) (±10%)	41.44	41.46	41.56
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.55	13.75	13.81
MAX POWER VOLTAGE - VPM (VOLTS)	34.21	34.28	34.31
MAX POWER CURRENT - IPM (AMPS)	12.87	12.99	13.12

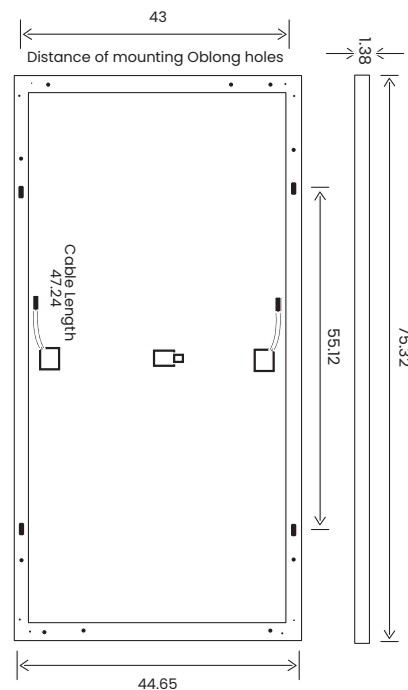
AT LOW IRRADIANCE (200W/M², 25°C AND AM1.5) THE MODULE YIELDS AT LEAST 95% OF THE STC EFFICIENCY.

Thermal data

TEMPERATURE COEFFICIENT OPEN-CIRCUIT VOLTAGE	-0.28%/°C
TEMPERATURE COEFFICIENT SHORT CIRCUIT CURRENT	0.05%/°C
TEMPERATURE COEFFICIENT RATED POWER	-0.39%/°C
NOCT (NORMAL OPERATING CELL TEMPERATURE)	45°C ± 2°C
OPEN CIRCUIT VOLTAGE - VOC (VOLTS) (±10%)	49.2
SHORT CIRCUIT CURRENT - ISC (AMPS) (± 10%)	13.56
MAX POWER VOLTAGE - VPM (VOLTS)	41.1
MAX POWER CURRENT - IPM (AMPS)	12.9

Mechanical data

NUMBER OF CELLS AND CELL TYPE	120 MONO PERC SOLAR CELLS (182mm X 91mm)
DIMENSIONS: (L X W X H)	75.32 inch X 44.65 inch X 1.38 inch
WEIGHT	52.91 Pounds
FRONT GLASS	3.2 mm HIGH TRANSMISSION, SOLAR GLASS
EMBEDDING	EVA
BACK SHEET	BLACK BACK SHEET
JUNCTION BOX	3 SPLIT JUNCTION BOX IP68
NUMBER OF BYPASS DIODES	3
CABLES	4mm ² SOLAR CABLES, LENGTH 1200±10mm
CONNECTORS	MULTI CONTACT OR STAUBLI OPTION AVAILABLE



Permissible operating conditions

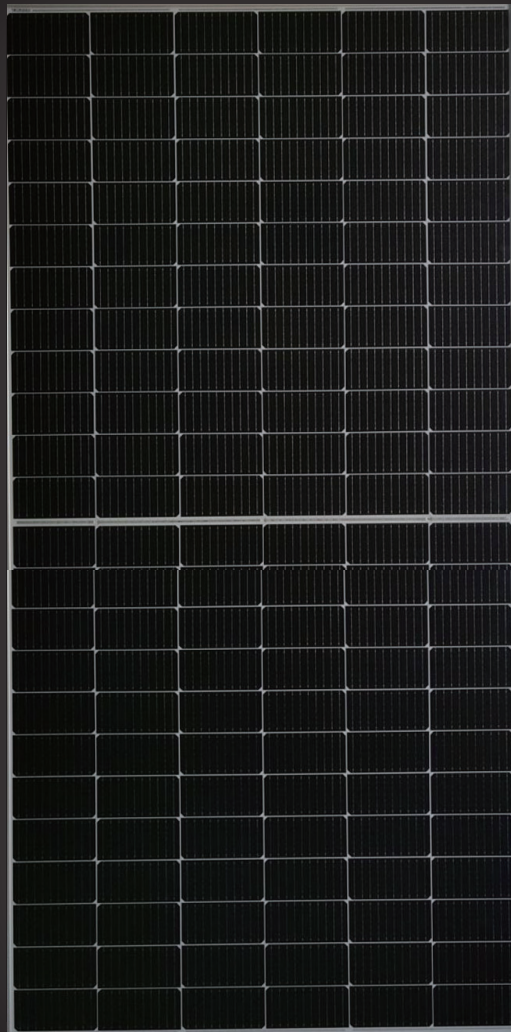
OPERATING TEMPERATURE RANGE	-40°C TO 85°C
MAX.SYSTEM VOLTAGE	1500V DC
MAXIMUM SNOW LOAD CAPACITY	5400PA
RESISTANCE AGAINST HAIL	MAX Ø24 MM WITH IMPACT SPEED OF 83KM/H
PROTECTION CLASS AGAINST ELECTRICAL SHOCK	II
MAXIMUM REVERSE CURRENT	25 A

Warranty

PRODUCT WARRANTY	12 YEARS
PERFORMANCE WARRANTY	25 YEARS
ANNUAL DEGRADATION	1 ST YEAR DEGRADATION, 2%, FROM 2 ND YEAR 0.55% ANNUAL DEGRADATION.*



LIGHTNING SERIES



550W | 144 HALF CELL BI-FACIAL MODULE



COMMERCIAL SOLAR PANEL

High Conversion Efficiency

Module efficiency up to 21.0% achieved through advanced cell technology and manufacturing process

Extended Mechanical Performance

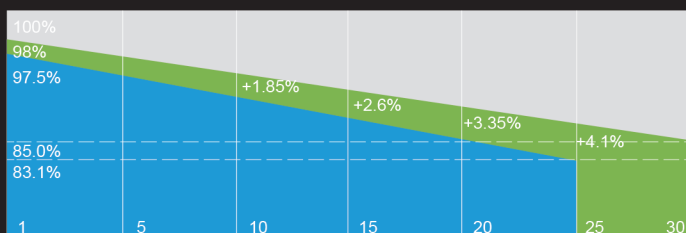
Module certified to withstand extreme wind (2400 Pa) and snow loading (5400 Pa)

Excellent Weak Light Performance

More power output in weak light condition such as cloudy morning and sunset

Quality Guarantee

High module quality ensures long-term reliability



■ Conventional power degradation

■ Spitzer power degradation



Warranty for materials and processing

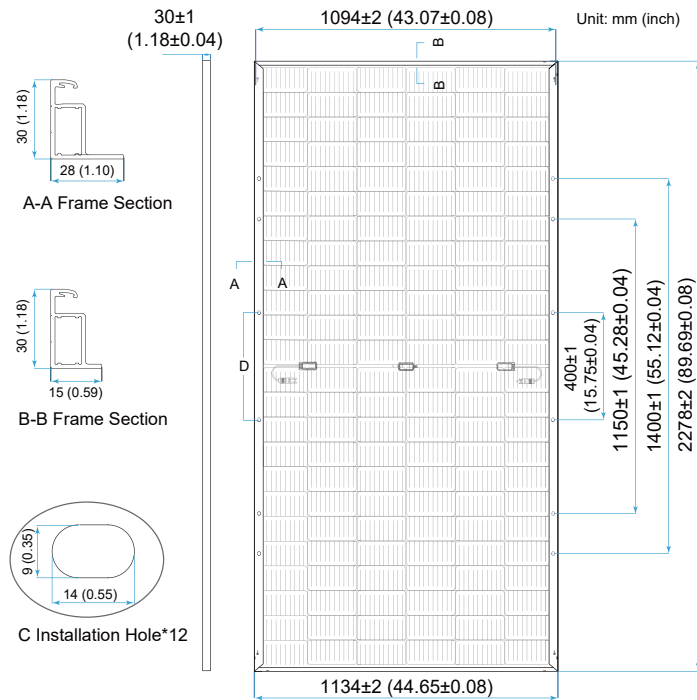


Warranty for extra linear power output



Warranty partner

IEC61215 / IEC61730 / UL61730
IEC61701 / IEC62716 / IEC60068
ISO9001



Mechanical Characteristics

Solar Cell	Mono PERC 182 mm
No. of Cells	144 (6 × 24)
Dimensions	2278 × 1134 × 30 mm (89.69× 44.65 × 1.18in.)
Weight	31.6kg (69.67lbs) ±5%
Cable Cross Section Size	4mm ² (IEC), 12 AWG(UL)
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	(-/+)1200mm (47,24in.) or customized
Connector	EVO2 or customized
Front/Back Glass	2.0mm (0.079in.) +2.0mm (0.079in.)
Container	36 pcs/Pallet, 576 pcs/40' HC

Operating Parameters

Max. System Voltage	DC 1500V (IEC/UL)
Operating Temperature	-40°C ~ +85°C (-40°F ~ +185°F)
Max. Fuse Rated Current	30A
Front Static Load(snow,wind)	5400Pa (112lb/ft ²)
Back Static Load(wind)	2400Pa (50lb/ft ²)
Bifaciality	70%±10%
Fire Resistance	IEC Class A, UL Type 29

Electrical Characteristics - STC

Irradiance 1000 W/m², ambient temperature 25 °C , AM1.5.

Maximum Power at STC (Pmax/W)	550	545	540	535	530
Power Tolerance (W)	0 ~ +5				
Optimum Operating Voltage (Vmp/V)	41.96	41.80	41.64	41.47	41.31
Optimum Operating Current (Imp/A)	13.11	13.04	12.97	12.90	12.83
Open Circuit Voltage (Voc/V)	49.90	49.75	49.60	49.45	49.30
Short Circuit Current (Isc/A)	14.00	13.93	13.86	13.79	13.72
Module Efficiency	21.3%	21.1%	20.9%	20.7%	20.5%

Electrical Characteristics - NMOT

Irradiance 800 W/m², ambient temperature 20 °C, AM1.5, wind speed 1 m/s.

Maximum Power at NMOT (Pmax/W)	416.0	412.2	408.5	404.6	400.8
Optimum Operating Voltage (Vmp/V)	39.79	39.64	39.49	39.33	39.18
Optimum Operating Current (Imp/A)	10.46	10.40	10.34	10.29	10.23
Open Circuit Voltage (Voc/V)	47.32	47.18	47.04	46.89	46.75
Short Circuit Current (Isc/A)	11.30	11.24	11.18	11.13	11.07

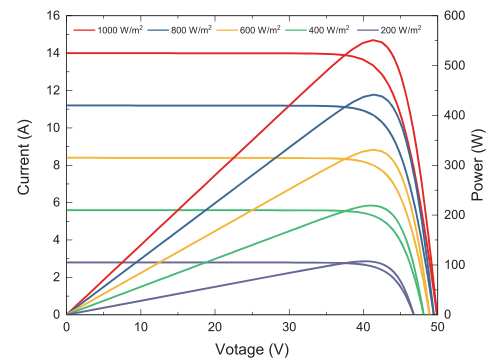
Different Rearside Power Gain (Reference to 540W Front)

Rearside Power Gain	5%	15%	25%
Maximum Power (Pmax/W)	567	621	675
Optimum Operating Voltage (Vmp/V)	41.8	41.8	41.9
Optimum Operating Current (Imp/A)	13.59	14.88	16.18
Open Circuit Voltage (Voc/V)	49.5	49.5	49.6
Short Circuit Current (Isc/A)	14.48	15.86	17.24
Module Efficiency	21.9%	24.0%	26.1%

Temperature Characteristics

Nominal Module Operating Temperature	42 ± 2 °C
Nominal Cell Operating Temperature	45 ± 2 °C
Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050%/°C

Current-Voltage & Power-Voltage Curve (550W)



An aerial photograph of several large industrial buildings with corrugated metal roofs. Numerous blue solar panels are mounted on the roofs, arranged in rows. The buildings are interconnected, and some have air conditioning units or other equipment on their roofs. The overall scene depicts a large-scale commercial solar installation.

Spitzer
ENERGY

COMMERCIAL SOLAR PANEL



Spitzer
ENERGY

EV CHARGING SOLUTIONS





EV CHARGER | AR EV 7KW / 11.5KW / 19.2KW



AR EV 7 | 11.5 | 19.2kW

Key Features

- Multiple electrical protection functions for user safety.
- Equipped with Bluetooth for easy commissioning.
- Connect any backend based on an OCPP 1.6J protocol.
- Compact design and user experience
- Networking supported: 4G, Wi-fi, Bluetooth,
- Ethernet , RS485
- Wall or pole mounted

Warranty

- Standard Warranty (10 yrs) Extended (20 yrs)



Technical Specifications

Spitzer Energy AR EV 7 / 11.5 / 19.2kW EV Charger

General Information				
Input/Output Power&Current Rating	7kW/32A max.	9.6kW/40A max.	11.5kW/48A max.	19.2kW / BOA max.
Input/Output Voltage Rating	208Vac± 10% or 240Vac± 10%, Three-Wire, 60Hz, LI+L2+PE			
Input interface	Wiring terminals or Plug	Wiring terminals or Plug	Wiring terminals	Wiring terminals
Charging Interface	1 *SAE J1772			
Metering	Onboard metering chip, Accuracy: Class 1			
Personal Protection	CCID 20			
Protection	Overcurrent, Overvoltage, Undervoltage, Residual current, Over temperature, Ground fault, Integrated surge protection			
User Interface				
Display	4.3-inch LCD display (optional), digital display(optional)			
Status Indication	LED indicators			
Bluetooth	Bluetooth 5.0 (optional)			
User Authentication	RFID card, QR code, Credit card (optional)			
RFID Reader	ISO/IEC 14443 A/B, ISO/IEC 18092, IEC/ISO 15693			
Communication				
Network Interface	4G, Wi-Fi, Ethernet			
Protocol (EVSE&Backend)	OCPP16J			
Protocol (EVSE&EV)	Control pilot (default), ISO 15118 (Optional)			
Environmental				
Operating Temperature	-22° F to 122° F			
Storage Temperature	-40° F to 185° F			
Humidity	5% to 95% no condensation			
Altitude	<3000m above sea level			
Mechanical				
NEMA Enclosure	Type 4			
IK Rating	IK10			
Cooling	Natural cooling			
Charging Cable Length	197inch ,296inch(optional)			
Dimensions (WxHxD)	11 *11 *6 inch			
Installation	Wall Mounting, Pole Mounting (pole is optional)			
Weight	Approx. 17 lbs	Approx. 12 lbs	Approx. 12 lbs	Approx. 17 lbs
Certification and standards				
Standards and compliance	UL2231-1, UL 2231-2, UL2594, FCC Part 15 Class B, Energy Star (Certification ongoing), CTEP (Certification ongoing)			
Certification	CSA			

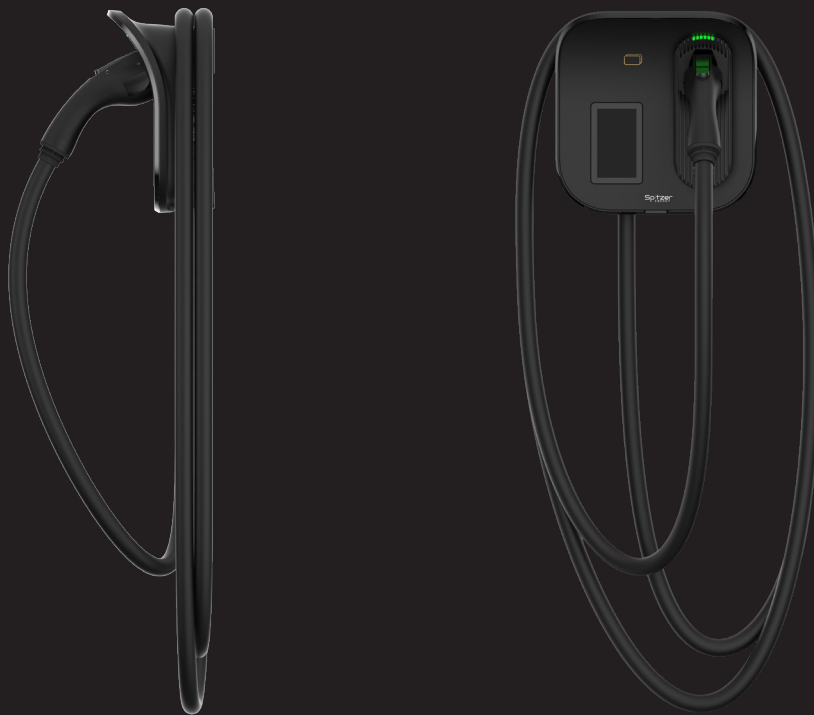


Silver Finish

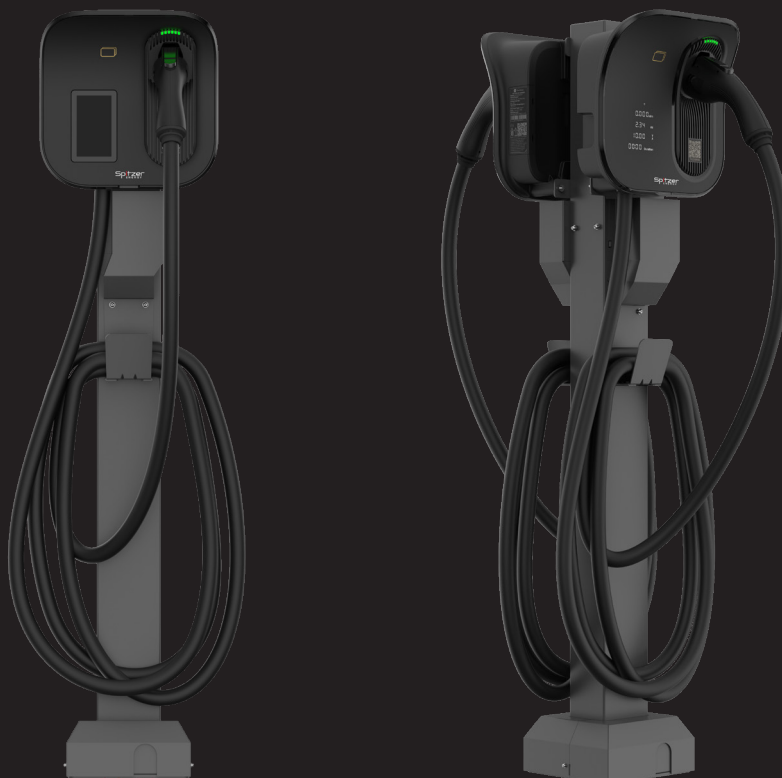


Black Finish

Wall Mount option



Pole Mount option





EV CHARGER | VS EV 30KW



VS EV 30kW



Key Features

- Over 94% peak efficiency & 100A high output current.
- 7 inches LCD Touch Panel & RFID card reader.
- Connect to any backend based on OCPP 1.6J protocol.
- Robust all-weather enclosure for indoor and outdoor use.
- Networking supported: 4G, Wi-fi, Bluetooth, Ethernet, RS485
- Wall or pole mounted

Warranty

- Standard Warranty (10 yrs) Extended (20 yrs)



Technical Specifications

Spitzer Energy VS EV 30kW EV Charger

General Information				
Input/Output Power&Current Rating	7kW/32A max.	9.6kW/40A max.	11.5kW/48A max.	19.2kW / BOA max.
Input/Output Voltage Rating	208Vac± 10% or 240Vac± 10%, Three-Wire, 60Hz, LI+L2+PE			
Input interface	Wiring terminals or Plug	Wiring terminals or Plug	Wiring terminals	Wiring terminals
Charging Interface	1 *SAE J1772			
Metering	Onboard metering chip, Accuracy: Class 1			
Personal Protection	CCID 20			
Protection	Overcurrent, Overvoltage, Undervoltage, Residual current, Over temperature, Ground fault, Integrated surge protection			
User Interface				
Display	4.3-inch LCD display (optional), digital display(optional)			
Status Indication	LED indicators			
Bluetaath	Bluetooth 5.0 (optional)			
User Authentication	RFID card, QR code, Credit card (optional)			
RFID Reader	ISO/IEC 14443 A/B, ISO/IEC 18092, IEC/ISO 15693			
Communication				
Network Interface	4G, Wi-Fi, Ethernet			
Protocol (EVSE&Backend)	OCPP16J			
Protocol (EVSE&EV)	Control pilot (default), ISO 15118 (Optional)			
Environmental				
Operating Temperature	-22° F to 122°F			
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Altitude	<3000m above sea level			
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NEMA Enclosure	Type 4			
IK Rating	IK10			
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Dimensions (WxHxD)	11 *11 *6 inch			
Installation	Wall Mounting, Pole Mounting (pole is optional)			
Weight	Approx. 17 lbs	Approx. 12 lbs	Approx. 12 lbs	Approx. 17 lbs
Certification and standards				
Standards and compliance	UL2231-1, UL 2231-2, UL2594, FCC Part 15 Class B, Energy Star (Certification ongoing), CTEP (Certification ongoing)			
Certification	CSA			

Wall Mount option



Pole Mount option





EV CHARGER | VS EV 60KW



VS EV 60kW

Key Features

- Multiple electrical protection functions for user safety.
- Equipped with Bluetooth for easy commissioning.
- Connect any backend based on OCPP 1.6J protocol.
- Compact design and user experience
- Networking supported: 4G, Wi-fi, Bluetooth,
- Ethernet , RS485
- Wall or pole mounted

Warranty

- Standard Warranty (10 yrs) Extended (20 yrs)

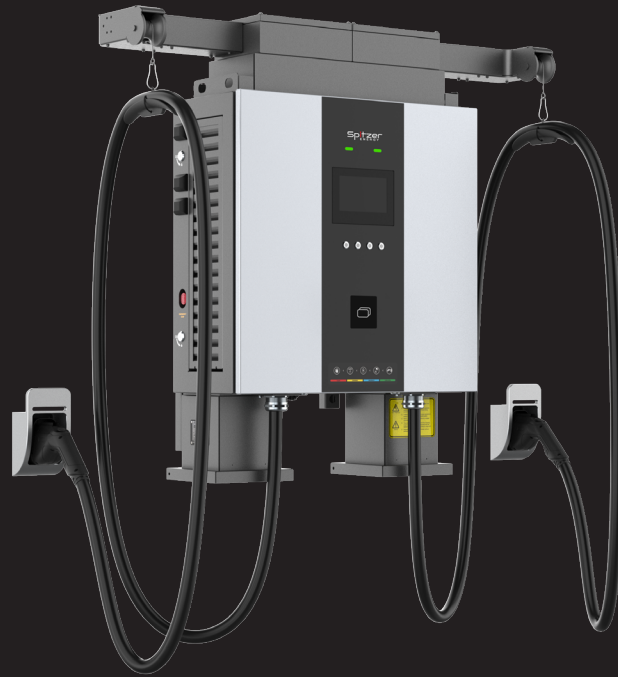


Technical Specifications

Spitzer Energy VS EV 60kW EV Charger

General Information				
Input/Output Power&Current Rating	7kW/32A max.	9.6kW/40A max.	11.5kW/48A max.	19.2kW / BOA max.
Input/Output Voltage Rating	208Vac± 10% or 240Vac± 10%, Three-Wire, 60Hz, LI+L2+PE			
Input interface	Wiring terminals or Plug	Wiring terminals or Plug	Wiring terminals	Wiring terminals
Charging Interface	1 *SAE J1772			
Metering	Onboard metering chip, Accuracy: Class 1			
Personal Protection	CCID 20			
Protection	Overcurrent, Overvoltage, Undervoltage, Residual current, Over temperature, Ground fault, Integrated surge protection			
User Interface				
Display	4.3-inch LCD display (optional), digital display(optional)			
Status Indication	LED indicators			
Bluetooth	Bluetooth 5.0 (optional)			
User Authentication	RFID card, QR code, Credit card (optional)			
RFID Reader	ISO/IEC 14443 A/B, ISO/IEC 18092, IEC/ISO 15693			
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Certification	CSA			

Wall Mount option



Pole Mount option





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