

Split Phase Hybrid Inverter

120/240V Split Phase
120/208V 2/3 Phase
240V Single Phase



SPZ HI-15KW-LV	10kW AC	15kW PV
SPZ HI-18KW-LV	12kW AC	18kW PV
SPZ HI-24KW-LV	16kW AC	24kW PV

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
- 100-200 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-15KW-LV	SPZ HI-18KW-LV	SPZ HI-24KW-LV
AC output			
Rated output power (kVA)	10	12	16
Max. apparent Power (kVA)	11	13.2	17.6
Max. output current (A)	20.8	33.3	41.7
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)	45.8	55	73.3
Max. grid passthrough current (A)	100	200	200
THDi	<3%		
Input (PV)			
Max. power (kW)	15	18	24
Max. DC voltage (V)	500		
MPPT voltage range (V)	120~500 / 120~430		
Max. Input current of single MPPT (A)	14		
Max. short circuit current (A)	22		
MPPT tracker/strings	4		
Battery			
Battery voltage range (V)	40~60	48-50	
Max. charging voltage (V)	48		
Max. charge/discharge current (A)	190/210	250/260	
Battery type	Lithium /Lead-acid		
Charging controller	3-Stage with equalization		
EPS output			
Rated power (kVA)	10	12	16
Max apparent power (kVA)	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~+140		
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)	116 lbs (123 lbs with breaker)		
Dimensions W*H*D (inch)	17.7 x 32.3 x 9.4		
Cooling	Fan cooling		
Noise emission (dB)	38		
Display	LCD,Touch panel(optional)		
Communication with BMS/Meter/EMS	RS485, CAN		
Supported communication interface	RS485, WLAN, 4G (optional)		
Self-consumption	<25W		
Safety	UL1741, UL1741SA&SB all options, UL1699B, CSA -C22.2 NO.107.1-01,RSD(NEC690.5,II,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		
Peak power off (Off grid)	110% 30s / 120% 10s / 200% 5s		

Dimensions

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General Data			
Grid connection standards	IEEE 1547, IEEE 2030.5, HECO Rule 14H, CA Rule 21 Phase I,II,III,CEC, CSIP,SRD2.0,SGIP,OGPe,NOM,California Prob65		
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		

