Spitzer ENERGY

Empowering Your Solar Solutions

SPZ HI-18KW-LV | 12kW AC | 18kW 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-18KW-LV
AC output	
Rated output power (kVA)	12
Max. apparent Power (kVA)	13.2
Max. output current (A)	33.3
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)	55
Max. grid passthrough current (A)	200
THDi	<3%
Input (PV)	
Max. power (kW)	18
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)	48-50
Max. charging voltage (V)	48
Max. charge/discharge current (A)	250/260
Battery type	Lithium /Lead-acid
Charging controller	3-Stage with equalization
EPS output	
Rated power (kVA)	12
Max apparent power (kVA)	13.2
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 efficency	99.9%
Europe efficiency (PV)	96.2%
PV to grid efficiency (PV)	96.5%
Battery to load efficiency	94.6%
PV to battery charing efficiency	95.8%
Grid to battery charing efficiency	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(NEC690.5,11,12)
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
Peak power off (Off grid)	110%,30s / 120%,10s / 200%,5s

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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