



IRON PRO LV SPLIT PHASE HYBRID INVERTER

Suitable for the US market split phase grid, photovoltaic input supports 1.5DC/AC ratio, battery input 48V flexible battery configuration.

- Up to 11.4kW output integrated 200A transfer Relay, support whole home backup power
- Lithium battery and lead acid battery compatibility
- With UPS function switch time < 10ms
- Compatibility with generator input for backups
- 120V/240 Vac single or split phase, 50/60 Hz
- Integrates utility and generator with dual AC inputs
- Up to 4 integrated MPPTs solar chargers (4 strings PV)
- Peak efficiency of 98% transformerless design
- Solar off-grid, solar grid tie for net metering
- DC coupled architecture
- Time of use, Grid zero, smart load, and backup functionalities
- Intelligent features; Enable load or battery prioritization
- Smart battery charging
- Full monitoring software for clients and partners
- One location for DC and AC electrical connections
- Easy to install, compact wall-mounted design
- Pair up to four SunBeat Li-ion batteries
- IP65/NEMA 4x for indoor and outdoor installations



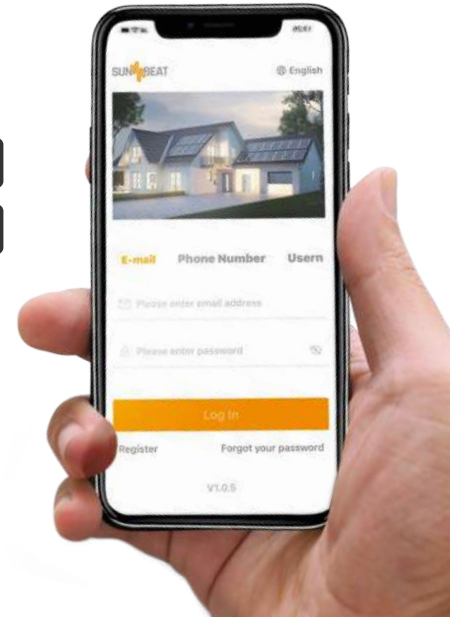
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Always refer to the manufacturer's manual for official guidelines, specifications, and instructions to ensure proper use and compliance with safety and performance standards.

MODEL	SUNBEAT IRON PRO 12
PV String Input	
Max PV Array Power [Wp]@STC	17100
Max DC Voltage [V]	600
MPPT Voltage Range [V]	90~550
Nominal DC Voltage [V]	380
Start Voltage [V]	100
Min Input Voltage [V]	80
Max. DC Input Current [A]	16/16/16/16
Max. DC Short Current [A]	19.2/19.2/19.2/19.2
Number of DC Connection Sets per MPPT	1/1/1/1
Number of MPPT	4
DC Switch	Integrated
Battery Input	
Battery Type	Lead-acid battery/Lithium battery
Battery Voltage Range [V]	40~60
Start Voltage [V]	42~60
Max. Charging/Discharging Current [A]	228
AC Output [On-grid]	
Rated AC Power [W]@208Vac	9880
Rated AC Power [W]@240Vac	11400
Rated AC Current [A]@208/240 V AC	47.5
Rated AC Voltage/ Range [V]	L1/L2/N/PE, 208V,120/240V; 183V~229V/211V~264V
Grid Frequency/ Range [Hz]	60Hz / 57~63
Power Factor [cosφ]	0.8 leading~0.8 lagging
Total Harmonic Distortion [THDi]	< 3% (at nominal power)
AC Output [Back-up Mode]	
Rated AC Power[W]@208V AC	9880
Rated AC Power[W]@240V AC	11400
Rated AC Current [A]@208/240 V AC	47.5
Peak output power (VA, 1min)	12540
Peak output power (W, 10ms)	17100
Rated Output Voltage [V]	240/120
Grid Frequency/ Range [Hz]	60Hz / 55~65
Output THDv (@ Linear Load)	<3%
Switching time (ms)	<10
AC Input [GEN]	
Maximum continuous input power [W] @240V	11400
Rated Voltage [V]	240/120
Rated Current [A]	47.5
Efficiency	
Maximum efficiency	97.2%
CEC Efficiency	96.5%
AC-Bat maximum efficiency	94.2%
Protection & Features	
Overload Protection	Integrated
ISO monitoring	Integrated
DC component monitoring	Integrated
Monitoring of ground fault current	Integrated
Grid monitoring	Integrated
AC output short circuit protection	Integrated
AC grounding detection	Integrated
AC Surge Protection	Type II
DC Surge Protection	Type II
Island protection monitoring	Integrated
AFCI	Integrated
RSD	Integrated
Interface	
Display	LED/APP+(Bluetooth)
Communication Port	RS485/CAN
Communication	Wi-Fi/4G(Optional)
Load Monitor	24 hours
General Data	
Topology Type	Transformer-less (DC-AC)
Standby power consumption [W]	<35
Operating Temperature Range	-40°C to +60°C (-40°F to 140°F) [Load shedding operation above 45°C]
Cooling Method	Smart air cooling
Ambient Humidity	0%~100% Non-condensing
Altitude (m)	<2000
Noise [dBA]	<50
Ingress Protection	NEMA 4x(IP65)
Mounting	Wall mounting
Dimensions[H*W*D] [inch]	810*485*247 mm (31.89*19.094*9.724 inch)
Weight [kg]	48 kg (105.82 lb)
Standard Warranty [Year]	10
Safety/EMC standard	UL 1741 and 1741SB; IEEE1547 and 1547.1; UL1699B, UL1998; CSA STD. C22.2 No.107.1, FCC, Part15, Class B, Rule21, HE CO 14H

SunBeat home energy monitoring

Eliminate electricity bill surprises by monitoring your electricity usage using real time energy information, detailed reports, and conveniently access your home energy information from your smartphone, tablet or computer.



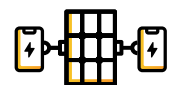
Designed for reliability, safety and ease of information



Integrates grid and generator power with dual AC inputs



Single or three phase systems configurations (with factory design approval)



Supports DC coupled and AC coupled off grid and grid tie architecture