



1000W+2000Wh ESS

Product Features

3 in 1 Household ESS, Plug and Play

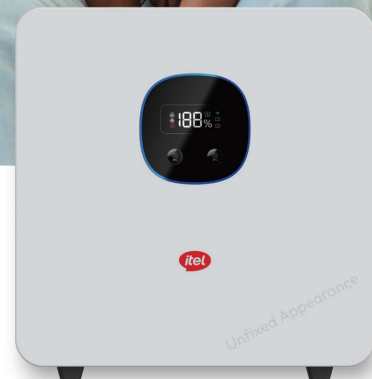
1200W PV MPPT Controller
1000W Hybrid Inverter
2000Wh Lithium Battery, Back up Time up to 2 Hours

Rapid Charge

PV and Grid Dual Charge, up to 1200W
Battery Fully Charged in 2 hours

High Performance Inverter

Pure Sine Wave
UPS Class Switch Time <20mS



Class-A LiFePO4 battery

Cycle Life 6000+, Up to 10 Years
LiFePO4 Battery, High Safety and Performance

Grid Compatibility

Phase Voltage Withstand Voltage 380V
Self-adapting to Unstable Power Grid THDv<3%
Self-adapting to Weak Grid
Intelligent Power Control Algorithm, Self-adapting to Household Appliances

Model	IESS-1K20N
Efficiency	
MPPT Efficiency	99.0%
Max. Battery Mode Conversion Efficiency	86.0%
PV Input	
Max. PV Input Power (W)	1200
Max. PV Input Voltage (V)	60
MPPT Voltage Range (V)	11~60
Max. Input Current (A)	30
Start-up voltage (Vdc)	11
Number of MPP Trackers	1
AC Input	
Input Voltage Range (Vac)	90~280
Nominal Input Voltage (Vac)	230
Maximum AC Input Power[bypass mode+Battery charge] (W)	1000
Maximum AC Input Current [bypass mode+Battery charge] (A)	8
Nominal Operating Frequency (Hz)	50/60
AC Output	
Nominal AC Output Power [inverter mode] (W)	1000
Max. Apparent Output Power [inverter mode] (VA)	1200
Nominal AC Output Voltage [inverter mode] (Vac)	230
Total Voltage Harmonic Distortion [inverter mode]	<3%
Max. Output Current [inverter mode] (A)	6.0
Nominal AC Frequency (Hz)	50
Switch Time (ms)	≤20
Surge Power (VA)	1200
Overload Capacity	CP 1000W Latch output @ <165Vac
DC Output	
	DC5521-1 + DC5521-2: total 12V/5A USB-C1 + USB-A1: 5V/3A, 9V/2A, total 20W USB-A2 + USB-A3 (COM): total 5V/2.5A
Battery	
Battery Type	LiFePO4
Rated Battery Voltage (Vdc)	6.4
Rated Capacity (Ah)	314
Battery Energy (kWh)	2000
Cycle Life (times)	6000
General Data	
Weight (kg)	~19
Dimension (W*H*L mm)	300*300*180
Operating Temperature Range (℃)	-10~+60℃, >40℃ Power Derating
Max. Operating Altitude (m)	4000, >2000 Power Derating
SOC Display	
Cool Method	Intelligent Fan Cooling
Ingress Protection	IP31
Noise (dB)	Silent mode: <45 (1m), Performance mode: <50 (1m)
Authentication Level	IEC62619/IEC62368/UN38.3
Protection	
Battery Fuse	Yes
Grid OVP	Yes
PV Over Voltage Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Over Temperature Protection	Yes
Surge Protection	AC:Type III