Intenergy

Comprehensive Solar Energy Storage Solutions Provider



INDUSTRY & COMMERCIAL SOLAR STORAGE SYSTEM

iPOWER STATION Series

30KW~500KW

The Commercial & Industrial Solar Storage System is an integrated energy solution that combines photovoltaic power generation with energy storage technology. Specifically designed for industrial and commercial scenarios, it aims to reduce electricity costs, enhance power supply reliability, and support the green energy transition. A PV-ESS comprises four core components: solar panels, battery storage, inverters, and an Energy Management System (EMS). Solar panels convert sunlight into electricity during daytime, prioritizing direct consumption by facilities while storing surplus energy. The storage system discharges during nighttime or cloudy periods to maintain operational continuity. Smart EMS algorithms optimize energy flow through real-time monitoring and predictive control.



MAIN COMPONENTS

Solar Panels

- N-type high-efficiency solar panels
- Configurable to different sizes and types based on system requirements

Energy Storage Batteries

- Lithium iron phosphate (LFP) batteries: Safe, efficient, and long-lasting
- Pollution-free with stable high-temperature performance

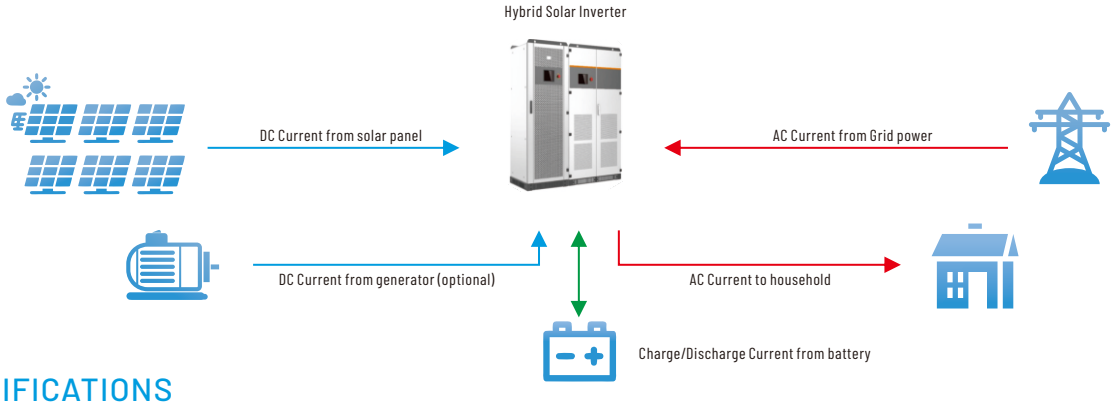
Energy Storage Inverter & Intelligent Control

- Smart and efficient design: Ensures stable power supply
- Real-time monitoring: Compatible with an Energy Management System (EMS) for system status tracking
- Integrated design: Simplified installation and seamless integration

For more information contact us at www.intenergy.cn

@2025 Intenergy. All rights reserved. All specifications are subject to change without prior notice.

PRODUCT ELECTRICAL DIAGRAM



PRODUCT SPECIFICATIONS

Model	ICSS-30KW	ICSS-50KW	ICSS-100KW	ICSS-250KW	ICSS-500KW
System Power	30KW	50KW	100KW	250KW	500KW
Solar Panel					
PV input Power	30KW	50KW	100KW	250KW	500KW
PV Panel	620W Mono N-Type				
Max PV Input Voltage	1000V				
MPPT Tracking Voltage Range	250V~850V				
MPPT Voltage Range(full load)		450V~850V			
Max PV input Current	18A	27A	44A	44A	54A
Storage Battery					
Battery Type	Lithium Battery				
Battery Capacity	70KWH	100KWH	200KWH	500KWH	1000KWH
Battery Voltage Range	250V~850V	320V~850V	420V~850V	420V~850V	500V~850V
Max Charging Power	36/72KW	60/120KW	120/180/240KW	300/360KW	600/660/720KW
Hybrids Inverter					
AC (On-Grid)					
Max Output Power	33KVA	55KVA	110KVA	275KVA	550KVA
Rated Output Power	30KW	50KW	100KW	250KW	500KW
Rated Power	400V				
Rated Current	43A	72A	144A	361A	722A
Voltage Range	320V~460V				
Rated Frequency	50Hz/60Hz				
FrecuencRange	45Hz~55Hz(50Hz), 55Hz~65Hz(60Hz)				
THDi	<3%				
Power Factor	1 Lagging-1 Leading				
AC Connection	3W+N+PE				
Transformer Ratio	100/400	200/400	270/400	270/400	315/400
AC (Off-Grid)					
Max Output Power	33KVA	55KVA	110KVA	275KVA	550KVA
Rated Output Power	30KW	50KW	100KW	250KW	500KW
Rated Power	400V				
Rated Current	43A	72A	144A	361A	722A
THDu	≤1% Linear, ≤5% Nonlinear				
Rated Frequency	50Hz/60Hz				
Overload capacity	110% Long-term				
Regular Parameters					
Operating temperature	-30°C~50°C				
Protect	Battery low voltage alarm, Battery low voltage protection, Anti-islanding protection, overload power protection, inverter output short circuit protection, Temperature protection				
Humidity	0%~95%, No condensation				
Class of protection	IP20				
Noise	≤70dB				
Elevation	5000m(>3000 Derating)				
Cooling Method	Air Cooling				
Display	Touch LCD display				
BMS Communication	RS485, CAN				
EMS Communication	RS485,TCP/IP				
Others					
System Cabinet	Matching customization				
Bracket	Matching customization				
Cabel	Matching				
Communication Control	Matching customization				

Wuxi Intenergy Co., Ltd.

Tel: +86(0)-510-88781862 Website: www.intenergy.cn E-Mail: info@intenergy.cn

Address: No.49-1 Zhujiang Road, National High-Tech development Zone, Wuxi 2141000,JiangSu,China.