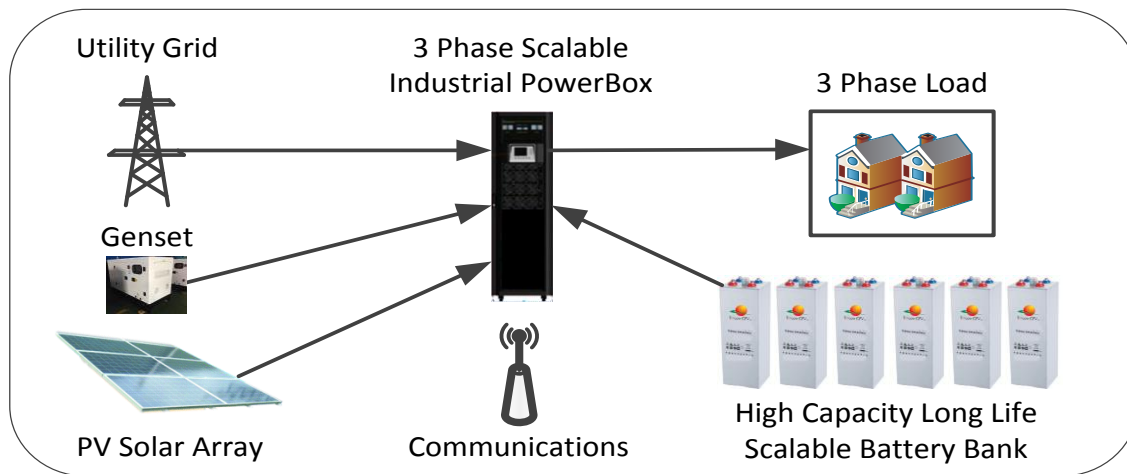


3 Phase Industrial Solar Green PowerBox

SCPV Rack Mount Modular 60kW – 210kW



MPPT Charge Controller

State-of-the-Art microprocessor controlled Maximum Power Point Tracking. The Modular design, allows for scalability across the range. Expandable up to 256 modules with an outstanding efficiency of 98%.

Energy Management Unit (EMU)

Designed for easy management, SCPV-Green PowerBox is equipped with graphic LCD screen. Intuitive design enhances display information and provides advanced configuration and management.

High efficiency online double conversion technology

SCPV - Green PowerBox is applied online double conversion technology with high efficiency up to 96% at over 50% load and 95% at 25% light load. It significantly reduces overall Total Cost of Ownership (TCO).

High scalability

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, SCPV-Green PowerBox simplifies future power expansion.

Unity output power factor

SCPV - Green PowerBox delivers unity output power (kVA=kW) providing the maximum power capacity to mission critical loads. It satisfies the requirements of the latest servers and optimizes IT investment with every penny.

Modular design lowers MTTR

Modular design is applied in all MPPT and power modules, EMU module and battery module. It will simplify maintenance and replacement with low MTTR (Mean Time TO Repair).

Ease of installation and maintenance

Built-in maintenance bypass assures continuous power to critical loads during maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.

Flexible battery configuration adapts for different applications

The quantity of Batteries needed will be scaled to support differing power requirements.

Battery charging

SCPV-Green PowerBox provides maximum 25A charging current from each MPPT power module.

High overload capability

SCPV-Green PowerBox supports, 110% overload for 60minutes, 120% for 10minutes, and 150% for 1min.

N+1 or N+X parallel redundancy for power guarantee

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding in a single rack enclosure from 60kW to 210kW and achieve N+1 or N+X redundancy in the same rack



Model	SCPV-60kW	SCPV-90kW	SCPV-120kW	SCPV-150kW	SCPV-180kW	SCPV-210kW
PHASE	3-phase in / 3-phase out					
TOTAL CAPACITY*	60 KW	90 KW	120 KW	150 KW	180 KW	210 KW
POWER MODULES	2	3	4	5	6	7
TOPOLOGY	True Double-Conversion Online					
INPUT						
Nominal Voltage	3 x 400 VAC (3Ph + N)					
Voltage Range	305 ~ 477 VAC @ Full load; 208 ~ 304VAC@ <70% Load					
Nominal Frequency	50/60Hz (Auto Sensing)					
Frequency Range	40Hz~70Hz					
Power Factor	> 0.99 @ 100% Load , >0.98 @ 50% Load					
Harmonic Distortion (THDi)	< 3% @ 100% load					
OUTPUT						
Nominal Voltage	3 x 400 VAC (3Ph + N)					
Voltage Regulation (Steady state)	S ± 1% Typical (balanced load) ; S ± 2% Typical (unbalanced load)					
Voltage Regulation (Transient)	S ± 5% Typical					
Nominal Frequency	50/60Hz					
Frequency Range (Synchronized)	46Hz ~ 54Hz or 56Hz ~ 64Hz					
Overload Capability	1 hour for 110%, 10 minutes for 120%,; 1 min for 150%, 200ms for >150%					
Harmonic Distortion	S1% THD (Linear Load) ; S 4% THD (Non-linear Load)					
Efficiency	> 96% @ over 50% Load, > 95% @ over 25% Load					
MPPT Charge Controller Module (The No of modules will depend on the overall system capacity)						
Vmin DC Volts	270V DC Input from PV array					
Vmax DC Voltage	520V DC Input from PV array					
Vmpp DC Voltage	300 - 450V DC Dynamic tracking for maximum power transfer					
Max Input Current	20A					
DC Input Power max	6kW per MPPT module, scalable to N x 6KW					
Voltage output DC nominal	240V DC					
Voltage output DC max	276V DC					
Maximum Charge Current	25A					
Battery Type	Valve Regulated Lead Acid battery					
Efficiency at full load %	98%					
Max No of MPPT Modules	Up to 256 modules					
Cooling	Twin Temperature controlled fans					
Protection	Overload Protection, Short Circuit Protection, Over and Under Voltage Protection, Over Temperature					
Energy Management Unit (EMU)						
Display	Multi-digit LCD Display					
Connectivity	USB, Wi-Fi,					
Cabinet						
Full Size, D x W x H(mm)	1100 x 600 x 2030 (42U) mm					
ENVIRONMENT						
Operation Temperature	0 ~ 40°C					
Relative Humidity	0 ~ 100% non-condensing					
Altitude	<1000m for Nominal power					
STANDARDS						
Safety	IEC/EN 60950-1; IEC/EN 62040-1					
EMC	IEC/EN 62040-2 Category C3					

* When temperature is above 30°C, the output power will be de-rated 27kW @ 31 ~ 35°C and 24kW @ 36 ~ 40°C.
 * Product specifications are subject to change without further notice.

Complete System Cabinet						
Chassis Size	Full size (42U)					
Capacity	60KVA	90KVA	120KVA	150KVA	180KVA	210KVA
Power Module Units	2	3	4	5	6	7
Power Redundancy Availability	Yes, 2+1	Yes, 3+1	No	Yes, 5+1	Yes, 6+1	Yes, 7+1
Built-in Battery	Yes	Yes	External battery	External battery	External battery	External battery
External battery is depending on customer's application						