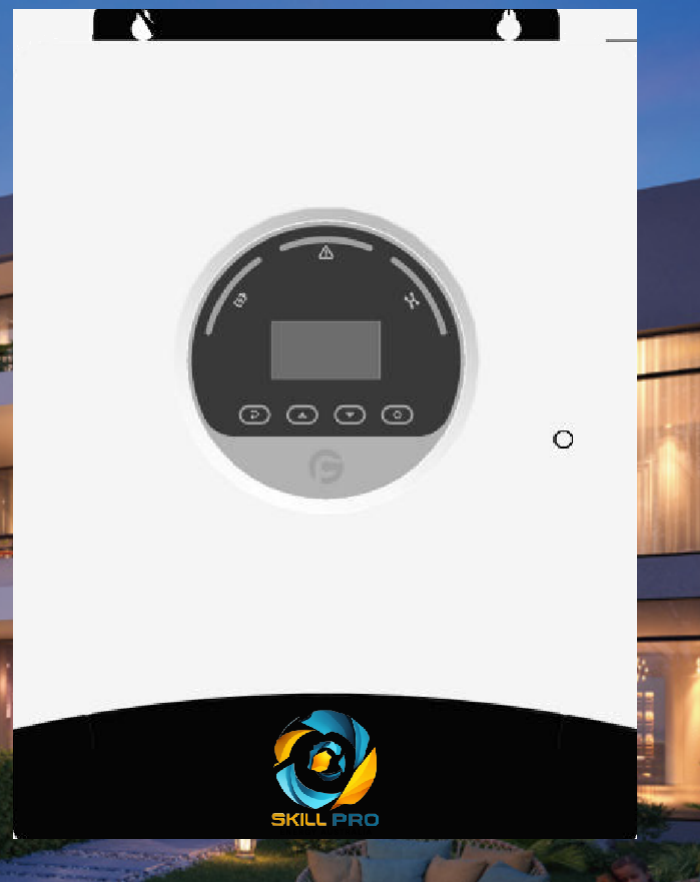


SP V PRO

Hybrid Solar Energy Storage Inverter

series **4/6/12kW**



MPPT

Pure sine wave MPPT solar inverter
Bulit-in 80/120A MPPT solar charger



Hybrid

SP V PRO series is suitable for off-grid and
on grid(optional) applications.



Battery

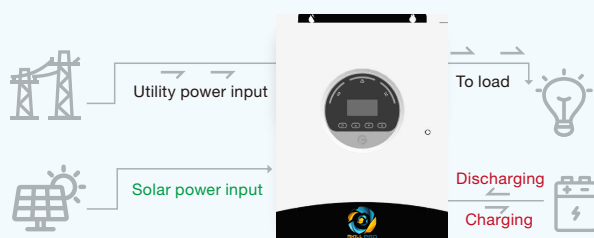
Battery equalization function extend life cycle
Reserved communication port(RS485,CAN)for BMS



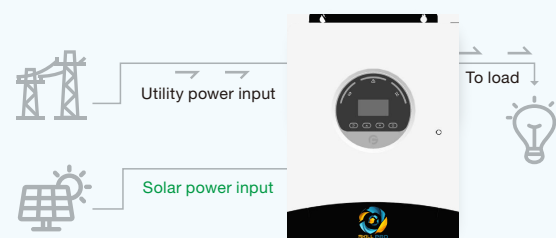
Easy access

High PV input voltage range
With touch buttons
Two outputs for smart load management (4/6KW OPT)

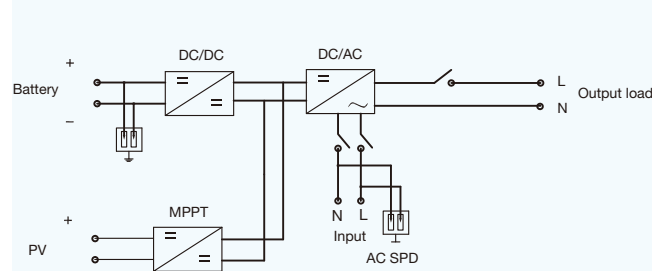
With battery connected



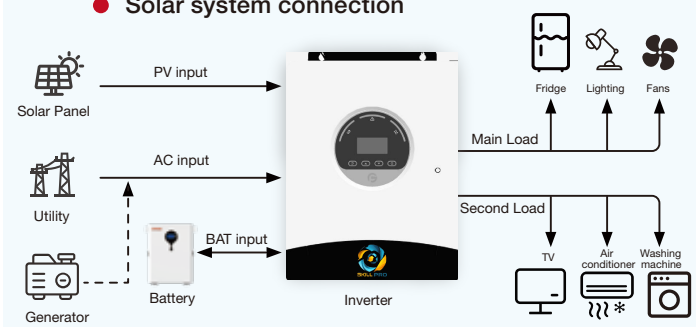
Without battery connected



Schematic diagram



Solar system connection



SKILL PRO

Model		SP V - 4KL1	SP V - 6KL1	SP V - 12KL1
PV (DC Input)	Recommended max. PV input power	4000W	6000W	12000W
	Max. input voltage(Voc)	500V	500V	500V
	MPPT operating voltage range	85V-450V(@+85V start up)	85V-450V (@+75V start up)	85V-450V (@+75V start up)
	Number of MPPT	1	1	2
	Max. number of input strings per MPPT	1	1	1
	Max. input current per MPPT	15A	27A	27/27A
	Max. short-circuit current per MPPT	18A	35A	35/35A
Grid (AC Input)	Max input power	5000W	11500W	16000W
	Max input current	28A	50A	90A
	Rated grid voltage	220/230/240Vac	220/230/240Vac	220/230/240Vac
	Rated grid frequency	50/60Hz	50/60Hz	50/60Hz
	Acceptable range	170-280Vac (For UPS); 90-280Vac (For Home Appliances)	170-280Vac (For UPS); 90-280Vac (For Home Appliances)	170-280Vac (For UPS); 90-280Vac (For Home Appliances)
Battery Parameters (Bidirection)	Battery type	LiFePO ₄ /Lead-acid	LiFePO ₄ /Lead-acid	LiFePO ₄ /Lead-acid
	Battery voltage range	20~30Vdc	40~60Vdc	40~60Vdc
	Rate Battery Voltage	24Vdc	48Vdc	48Vdc
	Max. charge/discharge current	120A/160A	120A/130A	210A/230A
	BMS communication mode	RS485	RS485	RS485
Back-up Output (AC Output)	Rated output power	4000W/4000VA	6000W/6000VA	12000W/12000VA(Twin output)
	Rated output current	18.2A	27.3A	54.5A
	Rated output voltage / Frequency	220/230/240Vac 50/60Hz	220/230/240Vac 50/60Hz	220/230/240Vac 50/60Hz
	Parallel Capacity	-	Max. 12 Units	Max. 12 Units
	Surge power	8000VA 5s	12000VA 5s	24000VA 5s
	THDv (@ linear load)	<3%	<3%	<3%
	Switching time	10ms typical (For UPS) 20ms typical (For Home Appliances)		
Efficiency	Peak efficiency	95%	98%	98.00%
	Max. MPPT efficiency	99.90%	99.90%	99.90%
Protection	Inner protection	√ Output short-circuit protection √ Output overvoltage protection		
	Surge protection	PV: Type III, AC: Type II		
	IP rating	IP54		
General Parameters	Operating temperature range	-10°C~ 55°C		
	Relative humidity range	5%~95%	5%~95%	5%~95%
	Max. operating altitude	>2000m derating	>2000m derating	>2000m derating
	Standby self-consumption	<10W	<10W	<20W
	Installation type	Wall-mounted	Wall-mounted	Wall-mounted
	Cooling mode	Fan cooling	Fan cooling	Fan cooling
	Communication	RS232/RS485/Dry contact/WI-FI	RS232/RS485/Dry contact/WI-FI	RS232/RS485/Dry contact/WI-FI
	Display	LCD	LCD	LCD
Mechanical Specifications	Inverter dimensions (L*W*H)(mm)	444.7*346.6*120	444.7*346.6*120	630*525*125
	Net weight (kg)	9.2	12.4	28.5
	Shipping dimensions (L*W*H)(mm)	560*465*240	560*465*240	745*650*240
	Gross weight (kg)	11.4	14.6	32
	Warranty Period	3 Years		