

SINGLE PHASE HYBRID INVERTER

SunExpert SL6K-EU



• FEATURES



Colorful touch LCD, Ip65 protection degree



Ac coupling to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 135A

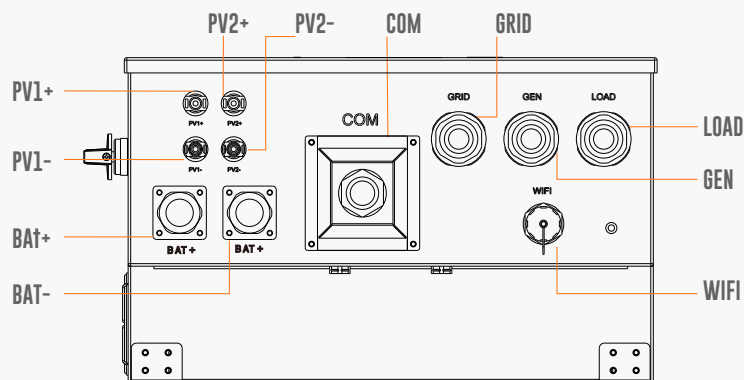


6 time periods for battery charging/discharging

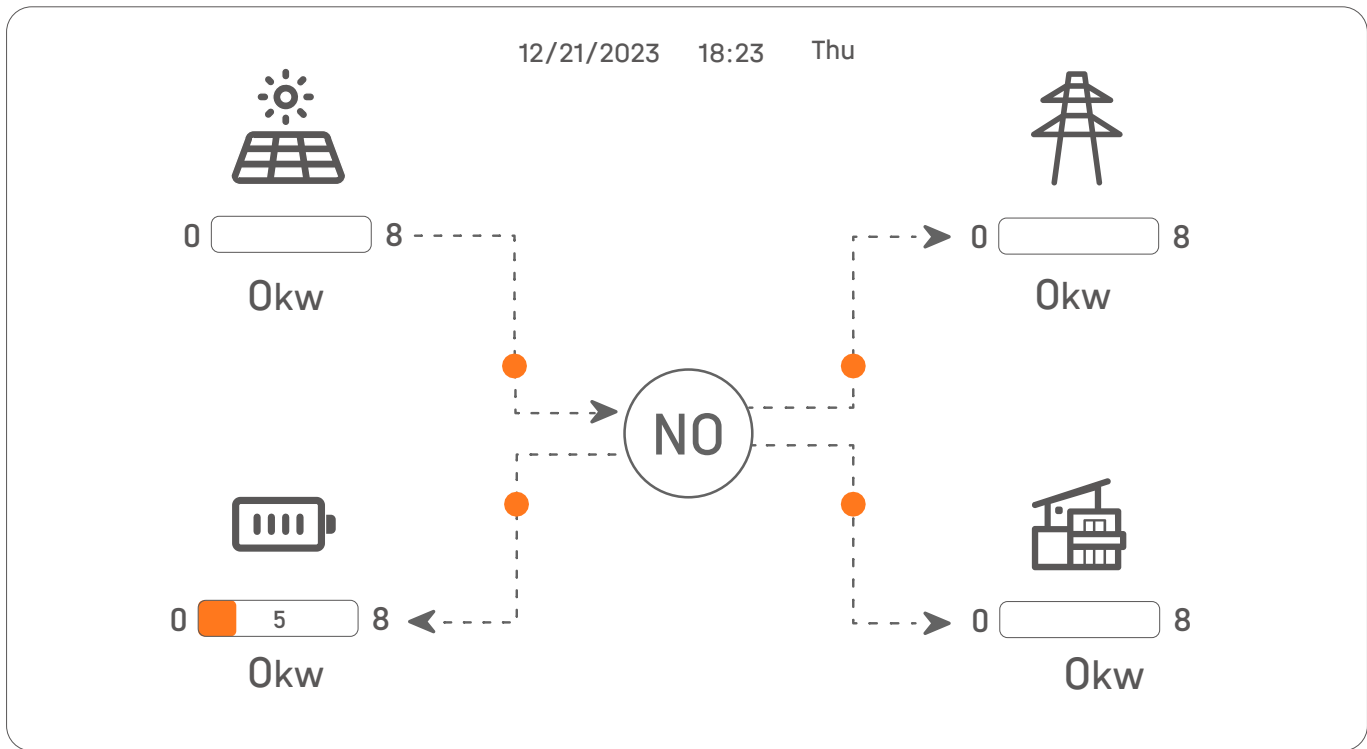


Support storing energy from diesel generator

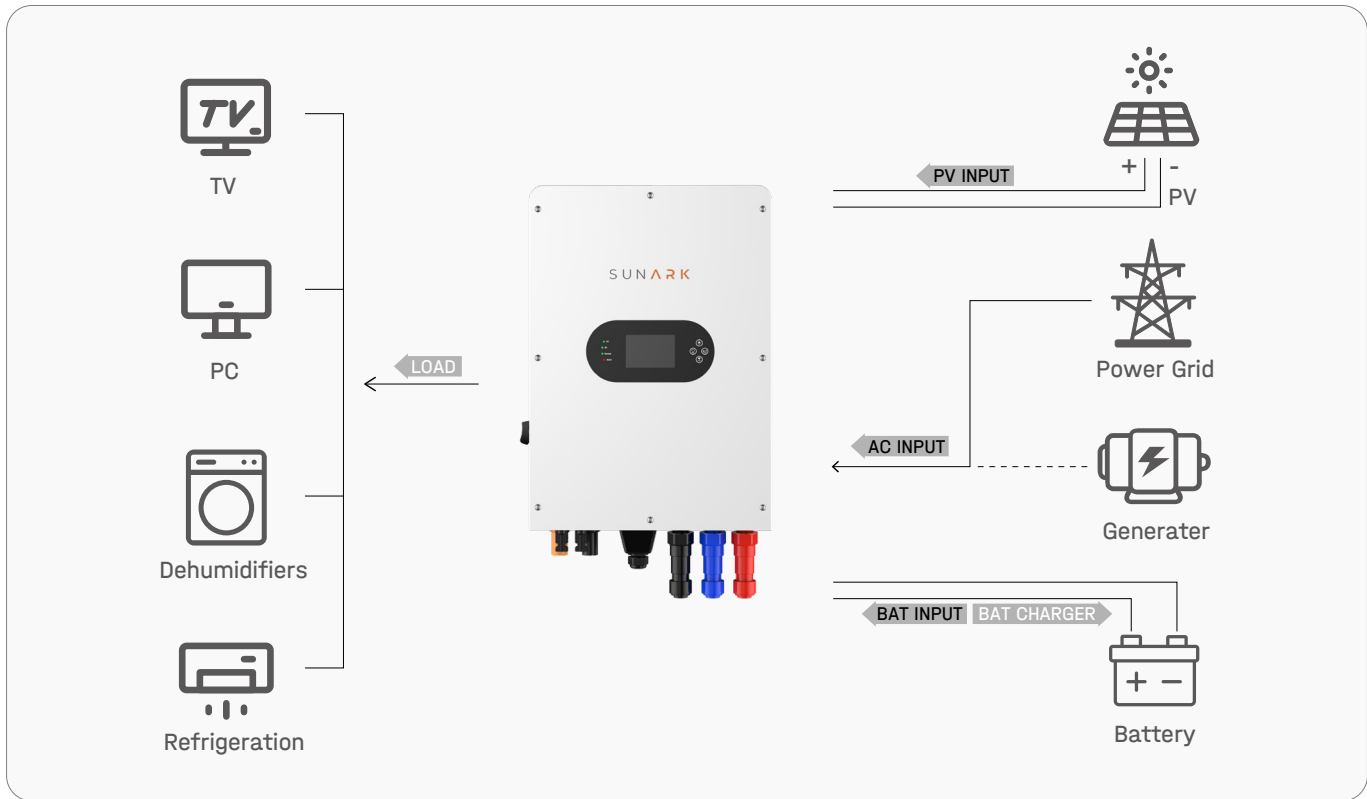
• PRODUCT CHARACTERISTICS



Model	SunExpert SL6K-EU
PV String Input Data	
Max. DC Input Power (W)	7800
Rated PV Input Voltage (V)	370 (125-500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Full Load MPPT Voltage Range (V)	200-425
Max. DC Input Current(A)	26+13
Max. DC Short Circuit Current(A)	44+22
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	2+1
AC Output Data	
Rated AC Output Power (W)	6000
Max AC Output Power (W)	6600
AC Output Rated Current (A)	27.3/26.1
Max AC Output Current (A)	30/28.7
Max.Continuous AC Passthrough (A)	40
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading - 0.8 lagging
AC Output Frequency and Voltage	50/60Hz; 220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	135
Max. Discharging Current (A)	135
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
MPPT Efficiency	99%
Protection	
Anti-islanding Protection	Yes
PV String Input Reverse Polarity Protection	Yes
Insulation Resistor Detection	Yes
Residual Current Monitoring Unit	Yes
Output Over Current Protection	Yes
Output Shorted Protection	Yes
Surge Protection	DC Type II/AC Type II
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
Grid Regulation	IEC61727/IEC 62116,EN 50549-1
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4,IEC/EN 62109-1,IEC/EN 62109-2
General Data	
Operating Temperature Range (C)	-40-60 C , >45 C Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI , APP
Size (W x H x D mm)	24
Protection Degree	330wx580Hx239.5D(Excluding connectors and brackets)
Installation Style	IP65
Warranty	Wall-mounted
Weight (kg)	5 Years (10Years Optional)



Lcd Display Icons



Basic System Architecture