



ACURE | SINGLE-PHASE HYBRID INVERTER




DATASHEET

SunC2-3.6LV01(W/B)
SunC2-5.0LV01(W/B)
SunC2-6.0LV01(W/B)
SunC2-7.0LV01(W/B)
SunC2-8.0LV01(W/B)

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v.7 (05/08/25)

 **PLEASE RETAIN FOR
FUTURE REFERENCE**

Model	SunC2-3.6LV01(W/B)	SunC2-5.0LV01(W/B)	SunC2-6.0LV01(W/B)	SunC2-7.0LV01(W/B)	SunC2-8.0LV01(W/B)
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range	40-60V				
Max. Charging Current	90A	120A	135A	175A	190A
Max. Discharging Current	90A	120A	135A	175A	190A
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max. PV Access Power	7200W	10000W	12000W	14000W	16000W
Max. PV Input Power	5760W	8000W	9600W	11200W	12800W
Max. PV Input Voltage	500V				
Start-up Voltage	125V				
MPPT Voltage Range	150-425V				
Rated PV Input Voltage	370V				
Max. Operating PV Input Current	18+18A			32+32A	
Max. Input Short-Circuit Current	27+27A			48+48A	
No. of MPP Trackers / No. of Strings MPP Tracker	2/1+1			2/2+2	
AC Input/Output Data					
Rated AC Input/Output Active Power	3600W	5000W	6000W	7000W	8000W
Max. AC Input/Output Apparent Power	3960VA	5500VA	6600W	7700VA	8800VA
Peak Power (off-grid)	2 times of rated power, 10s				
Rated AC Input/Output Current	16.4/15.7A	22.8/21.8A	27.3/26.1	31.9/30.5A	36.4/34.8A
Max. AC Input/Output Current	18/17.3A	25/24A	30/28.7	35/33.5A	40/38.3A
Max. Continuous AC Passthrough (Grid to Load)	35A		40A	50A	
Rated Input/Output Voltage/Range	220V/230V 0.85Un-1.1Un				
Grid Connection Form	L+N+PE				
Rated Input/Output Grid Frequency/Range	50/45-55Hz 60/55-65Hz				
Power Factor Adjustment Range	0.8 leading-0.8 lagging				
Total Current Harmonic Distortion THDi	<3% (of nominal power)				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Display	LCD+LED				
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				

General Data

Operating Temperature Range	-40 to +60°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude	2000m
Noise	<30dB
Ingress Protection (IP) Rating	IP65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (WxHxD)	366x630x281.41mm (Excluding Connectors and Brackets)
Weight	27.1kg
Type of Cooling	Intelligent Air Cooling
Warranty	5 years (10 years when installed with a Sunsynk battery)
Grid Regulation	G98/G99, NRS 097-2-1, EN 50549-1
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2



NOTE:

Safe Transport and Handling of Inverter:

When transporting the equipment, use its original packaging and keep it as a complete unit. Store the product in a dry environment, avoiding direct sunlight, and maintain a temperature range between -40°C and 60°C. Since the equipment can be quite heavy, always consider its total weight when moving, transporting, or installing it, ensuring that the installation site has adequate load-bearing capacity. Transporting and installing the inverter should be carried out solely by qualified personnel.



Contact Us

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