



ACURE | SINGLE-PHASE HYBRID INVERTER



DATASHEET

SunC1-3.6LV01(W/B)

SunC1-5.0LV01(W/B)

SunC1-6.0LV01(W/B)

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v.5 (01/07/25)

 **PLEASE RETAIN FOR
FUTURE REFERENCE**

Model	SunC1-3.6LV01(W/B)	SunC1-5.0LV01(W/B)	SunC1-6.0LV01(W/B)
Battery Input Data			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range	40-60V		
Max. Charging Current	90A	120A	135A
Max. Discharging Current	90A	120A	135A
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
Max. PV Input Power	5760W	8000W	9600W
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		
Max. Input Short-Circuit Current	27+27A		
No. of MPP Trackers / No. of Strings MPP Tracker	2/1+1		
AC Input/Output Data			
Rated AC Input/Output Active Power	3600W	5000W	6000W
Max. AC Input/Output Apparent Power	3960VA	5500VA	6600VA
Rated AC Input/Output Current	16.4/15.7A	22.8/21.8A	27.3/26.1A
Max. AC Input/Output Current	18/17.3A	25/24A	30/28.7A
Max. Continuous AC Passthrough (Grid to Load)	35A		40A
Peak Power (Off-Grid)	2 times of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range	220/230V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50/45-55Hz, 60/55-65Hz		
Grid Connection Form	L+N+PE		
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			
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)	376x530x276mm (Excluding Connectors and Brackets)
Weight	19.35kg
Type of Cooling	Natural 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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