



# ACURE | THREE-PHASE HYBRID INVERTER



## DATASHEET

SunC3-5.0LV03(W/B)  
SunC3-8.0LV03(W/B)  
SunC3-12.0LV03(W/B)

[www.sunsynk.com](http://www.sunsynk.com)  
[sales@sunsynk.com](mailto:sales@sunsynk.com)  
[customerservices@sunsynk.com](mailto:customerservices@sunsynk.com)

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Model	SunC3-5.0LV03(W/B)	SunC3-8.0LV03(W/B)	SunC3-12.0LV03(W/B)
<b>Battery Input Data</b>			
Battery Type	Lead-acid or Lithium-ion		
Battery Voltage Range	40-60V		
Max. Charging Current	120A	190A	240A
Max. Discharging Current	120A	190A	240A
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
<b>PV String Input Data</b>			
Max. PV Access Power	10000W	16000W	24000W
Max. PV Input Power	7500W	12000W	18000W
Max. PV Input Voltage	800V		
Start-up Voltage	160V		
MPPT Voltage Range	200-650V		
Rated PV Input Voltage	550V		
Max. Operating PV Input Current	26+26A		
Max. Input Short-Circuit Current	39+39A		
No. of MPP Trackers / No. of Strings MPP Tracker	2/2+2		
<b>AC Input/Output Data</b>			
Rated AC Input/Output Active Power	5000W	8000W	12000W
Max. AC Input/Output Apparent Power	5500VA	8800VA	13200VA
Rated AC Input/Output Current	7.6/7.3A	12.2/11.6A	18.2/17.4A
Max. AC Input/Output Current	8.4/8A	13.4/12.8A	20/19.2A
Max. Continuous AC Passthrough (Grid to Load)	45A		
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	220/380V, 230/400V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range	50/45-55Hz, 60/55-65Hz		
Grid Connection Form	3L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
<b>Efficiency</b>			
Max. Efficiency	97.6%		
Euro Efficiency	97.0%		
MPPT Efficiency	>99%		
<b>Protection</b>			
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)		
<b>Interface</b>			
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	3000m
Noise	≤55dB
Ingress Protection (IP) Rating	IP65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (WxHxD)	386×721×277mm (Excluding Connectors and Brackets)
Weight	36.2kg
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

-  **Call us:** +44 151 832 4300 **Email us:** [sales@sunsynk.com](mailto:sales@sunsynk.com)
-  **HK Address:** Room 702-704, 7/F Texwood Plaza, 6 How Ming Street, Kwun Tong, Kowloon, Hong Kong.
-  **UK Address:** Sunsynk UK Ltd, 17 Turnstone Business Park, Mulberry Avenue, Widnes, Cheshire, WA8 0WN.
-  **SA Address:** Globaltech Sunsynk South Africa (Pty) Ltd, Unit 2 Highview Boulevard, Ferndale 2194.
-  **NL Address:** Sunsynk NL BV, Henri Wijnmalenweg 8, 5657 EP Eindhoven, Netherlands.