



Grid-connected PV Inverter

SUN-15K-G05

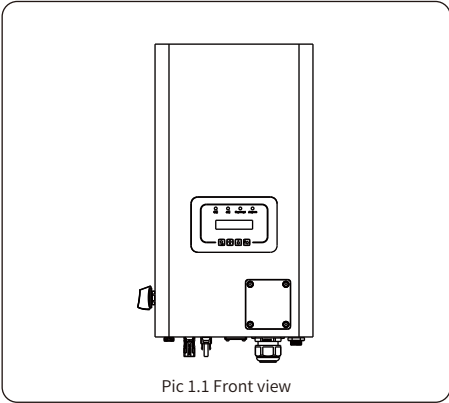
User Manual



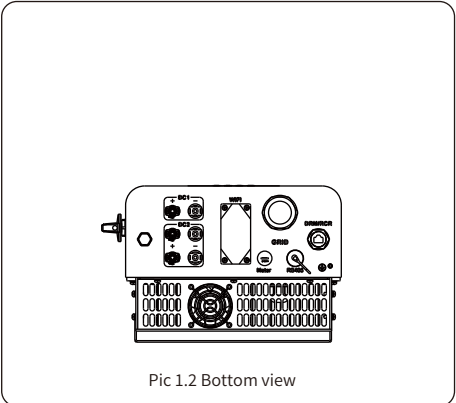
1. Introduction

1.1 Appearance Introduction

On-grid Inverter can convert solar panel DC power into AC power which can directly input to the grid. Its appearance is shown below. These models contain SUN-15K-G05. The following is collectively referred to as “inverter” .



Pic 1.1 Front view



Pic 1.2 Bottom view

*Demand Response Modes / Ripple Control Receiver (Optional)

1.2 Labels description

Label	Description
	Caution, risk of electric shock symbol indicates important safety instructions, which if not correctly followed, could result in electric shock.
	The DC input terminals of the inverter must not be grounded.
	CE mark of conformity
	Please read the instructions carefully before use.
	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. Indicates that the device, accessories and the packaging must not be disposed as unsorted municipal waste and must be collected separately at the end of the usage. Please follow Local Ordinances or Regulations for disposal or contact an authorized representative of the manufacturer for information concerning the decommissioning of equipment.

11.Specification

Model	SUN-15K-G05
PV String Input Data	
Max. PV Input Power(kW)	22.5
Max. PV Input Voltage(V)	1100
Start-up Voltage(V)	140
PV Input Voltage Range(V)	140-1100
MPPT Voltage Range(V)	120-1000
Full Load MPPT Voltage Range(V)	480-850
Rated PV Input Voltage(V)	600
Max. Input Short Circuit Current (A)	30+39
Max. Operating PV Input Current(A)	20+26
No. of MPP Trackers/No. of Strings MPP Tracker	2/1+2
Max. Inverter Backfeed Current To the Array	0
AC Output Data	
Rated AC Output Active Power(kW)	15
Max. AC Output Active Power(W)	16.5
Max.AC Output Apparent Power(kVA)	16.5
Rated AC Output current (A)	22.8/21.8
Max.AC Output Current(A)	25/24.0
Max. Output Fault Current (A)	43.6
Max. Output Overcurrent Protection (A)	47.7
Rated Output voltage/range (V)	220/380,230/400 0.85Un-1.1Un
Grid Connection Form	3L+N+PE
Rated Output Grid Frequency/range(Hz)	50Hz/45Hz-55Hz, 60Hz/55Hz-65Hz
Power Factor Adjustment Range	0.8 leading-0.8lagging
Total Current Harmonic Distortion THDi	<3%
DC Injection Current	<0.5%In
Efficiency	
Max.Efficiency	98.5%
Euro Efficiency	98.0%
MPPT Efficiency	>99%
Equipment Protection	
DC reverse polarity protection	yes
AC Output Overcurrent Protection	yes
AC Output Overvoltage Protection	yes
AC Output Short Circuit Protection	yes
Thermal Protection	yes
Insulation Impedance detection	yes
DC Component Monitoring	yes
Arc fault circuit interrupter (AFCI)	Optional
Anti-islanding protection	yes
DC Switch	yes
Residual Current Detection	yes
Surge Protection Level	TYPE II(DC),TYPE II(AC)

Interface	
Communication Interface	RS485/RS232
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)
Display	LCD+LED
General Data	
Operating Temperature Range (°C)	-25°C to +60°C,>45°C derating
Permissible Ambient Humidity	0-100%
Permissible Altitude (m)	4000m
Noise (dB)	< 45 dB
Ingress Protection(IP) Rating	IP 65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC),OVC III(AC)
Cabinet Size (W*H*D) [mm]	283×525×188 (Excluding connectors and brackets)
Weight [kg]	12
Warranty [year]	Standard 5 years, extendable warranty
Type Of Cooling	Intelligent air cooling
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G98, G99, VDE 4105
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2

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