



SOLAR HYBRID INVERTERS



- 3kW to 8kW (LV) Single Phase
- 6kW to 20kW (LV) Three phase
- 30kW to 50kW (HV) Three Phase

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Rating	3 kW/3.6 kW	4kW/5kW	6kW	8kW
Model	SHU-33BLP1	SHU-53BLP1	SHU-63BLP1	SHU-83BLP1
PV String Input Data				
Max. PV Input Power (W)	5760	8000	9600	12800
Max. PV Input Voltage (V)	500			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Rated PV Input Voltage (V)	370			
Max. Operating PV Input Current (A)	13+13			26+26
Max. Input Short-Circuit Current (A)	17+17			34+34
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1			2/2+2
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	90	120	135	190
Max. Discharging Current (A)	90	120	135	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	3600	5000	6000	8000
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	36.4/34.8
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7	40/38.3
Max. Continuous AC Passthrough(grid to load) (A)	35		40	50
Peak Power (off-grid) (W)	2 times of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Rated Input/Output Voltage	230/230			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55			
Grid Connection Form	L+N+PE			
THDi	<3% (of nominal power)			
DC Injection Current	<0.5% In			
Efficiency				
Max. Efficiency	97.6%			
Equipment 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&AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (℃)	-40 to +60C, >45C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	2000m			
Noise (dB)	<30			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	330×580×232 (Excluding Connectors and Brackets)			
Weight (kg)	24.9			
Type of Cooling	Intelligent Air Cooling			
Warranty	5 Years			
IEC Certificates	IEC 61727, IEC 62116, IEC 61683, IEC 60068-2/1/2/14/30, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-3/11/12 IEC/EN 62109-1, IEC/EN 62109-2, EN 55011:2016/A2:2021			

Rating	6kW		8kW		10kW		12kW		15kW		20kW	
Model	SHU-63BLP3		SHU-83BLP3		SHU-103BLP3		SHU-123BLP3		SHU-153BLP3		SHU-20BLP3	
PV String Input Data												
Max. PV Input Power (W)	9000		12000		15000		18000		24000		32000	
Max. PV Input Voltage (V)	800											
Start-up Voltage (V)	160											
MPPT Voltage Range (V)	200-650								160-650			
Rated PV Input Voltage (V)	550								550			
Max. Operating PV Input Current (A)	20+20								36+36			
Max. Input Short-Circuit Current (A)	30+30								54+54			
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1								2/2+2			
Battery Input Data												
Battery Type	Lead-acid or Lithium-ion											
Battery Voltage Range (V)	40-60											
Max. Charging Current (A)	135	190	210		240		280		350			
Max. Discharging Current (A)	135	190	210		240		280		350			
Charging Strategy for Li-ion Battery	Self-adaption to BMS											
Number of Battery Input	1											
AC Input/Output Data												
Rated AC Input/Output Active Power (W)	6000		8000		10000		12000		15000		20000	
Rated AC Input/Output Current (A)	9.1/8.7		12.2/11.6		15.2/14.5		18.2/17.4		22.8/21.8		30.4/29	
Max. AC Input/Output Current (A)	10/9.6		13.4/12.8		16.7/16		20/19.2		25/24		33.4/31.9	
Max.Continuous AC Passthrough (grid to load) (A)	45								70			
Peak Power (off-grid) (W)	2 times of rated power, 10s											
Power Factor Adjustment Range	0.8 leading to 0.8 lagging											
Rated Input/Output Voltage/Range (V)	230/400V & 230/400V											
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55											
Grid Connection Form	3L+N+PE											
THDi	<3% (of nominal power)											
DC Injection Current	<0.5% In											
Efficiency												
Max. Efficiency	97.6%											
Equipment 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&AC)											
Interface												
Communication Interface	RS485/RS232/CAN											
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)											
General Data												
Operating Temperature Range (C)	-40 to +60C, >45CDerating											
Permissible Ambient Humidity	0-100%											
Permissible Altitude	3000m											
Noise (dB)	≤55								<60			
Ingress Protection(IP) Rating	IP 65											
Inverter Topology	Non-Isolated											
Over Voltage Category	OVC II(DC), OVC III(AC)											
Cabinet Size (WxHxD mm) (Excluding Connectors and Brackets)	380×660×250								456X750X268.5			
Weight (kg)	35.2								51.9			
Type of Cooling	Intelligent Air Cooling											
Warranty	5 Years											
IEC Certificates	IEC 61727, IEC 62116, IEC 61683, IEC 60068-2/1/2/14/30 ,IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/3/11/12 IEC/EN 62109-1, IEC/EN 62109-2, EN 55011:2016/A2:2021											

Ratings	30kW	40kW	50kW
Model	SHU-303BHP3	SHU-403BHP3	SHU-503BHP3
PV String Input Data			
Max. PV Input Power (W)	48000	64000	80000
Max. PV Input Voltage (V)	1000		
Start-up Voltage (V)	180		
MPPT Voltage Range (V)	150-850		
Rated PV Input Voltage (V)	600		
Max. Operating PV Input Current (A)	36+36+36	36+36+36+36	
Max. Input Short-Circuit Current (A)	55+55+55	55+55+55+55	
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2	4/2+2+2+2	
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-800		
Max. Charging Current (A)	50+50		
Max. Discharging Current (A)	50+50		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	2		
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	30000	40000	50000
Rated AC Input/Output Current (A)	45.5/43.5	60.7/58	75.8/72.5
Max. AC Input/Output Current (A)	50/47.9	66.7/63.8	83.4/79.8
Max. Continuous AC Passthrough (grid to load) (A)	200		
Peak Power (off-grid) (W)	1.5 times of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage	230/400V & 230/400V		
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55		
Grid Connection Form	3L+N+PE		
THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Equipment 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 & AC)		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range C	-40 to +60C, >45C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	≤65		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	527×894×294 (Excluding Connectors and Brackets)		
Weight (kg)	80		
Type of Cooling	Intelligent Air Cooling		
Warranty	5 Years		
IEC Certificates	IEC 61727, IEC 62116, IEC 61683, IEC 60068-2/1/2/14/30 ,IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/3/11/12 IEC/EN 62109-1, IEC/EN 62109-2, EN 55011:2016/A2:2021		



SOLAR ON GRID INVERTERS | SOLAR HYBRID INVERTERS | ENERGY STORAGE SYSTEM | EV CHARGERS |
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Head Quarters

GF-3, KSSIDC Multi-Storied Building,
5th Cross, 1st Stage, Peenya Industrial Estate,
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Factory

No 471, D-2, 4th Phase, Near Brindavan Bus
Stop, Peenya Industrial Area, Bengaluru,
PIN-560058