



RICH SOLAR

PRODUCT INTRODUCTION

Three Phase Storage Inverter with Two MPPT

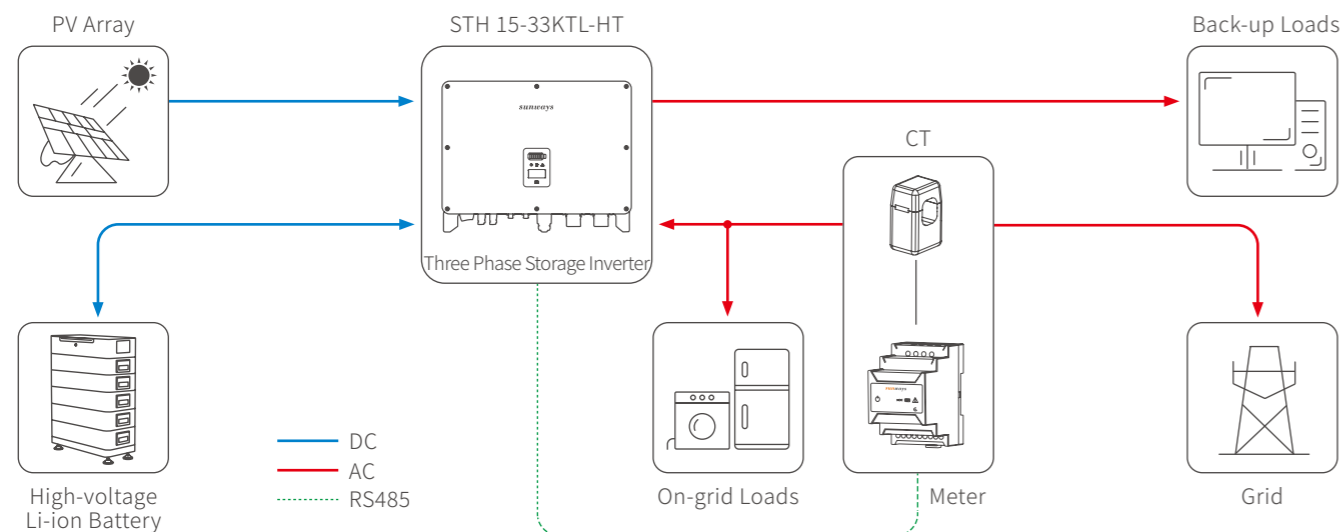
CBG-LF15-33KW-TPM-S

MAX 98.2% EFFICIENCY

IP66 PROTECTION



- Max. efficiency up to 98.2%
- Up to 110% phase unbalanced output available on both on-grid and back-up outputs.
- Back-up paralleling available of up to 3 units
- Fast and easy data checking and commissioning via App or OLED display
- 135~800V wide battery connection range to store more energy and optimize self-sufficiency rate.
- Support continuous 110% AC output overloading on both on-grid and back up sides
- Diversified work modes that are compatible with the majority of application scenarios.
- Uninterruptible power supply, switch to off-grid mode within 10ms



Technical Parameters

CBG-LF15-33KW-TPM-S

Model		CBG-15KTL-HT	CBG-17KTL-HT	CBG-20KTL-HT	CBG-25KTL-HT	CBG-29.9KTL-HT	CBG-30KTL-HT	CBG-33KTL-HT
PV Input	Max. Input Power (W)	24,000	27,200	32,000	40,000	47,840	48,000	52,800
	Start-up Voltage (V)	135	135	135	135	135	135	135
	Max. DC Input Voltage (V)	1000	1000	1000	1000	1000	1000	1000
	Rated DC Input Voltage (V)	620	620	620	620	620	620	620
	MPPT Voltage Range (V)	200-850	200-850	200-850	200-850	200-850	200-850	200-850
	No. of MPP Trackers	2	2	2	2	2	2	2
	No. of DC Inputs per MPPT	2/2	2/2	2/2	2/2	2/2	2/2	2/2
	Max. Input Current (A)	26/26	26/26	26/26	26/26	26/26	26/26	26/26
	Max. Short-circuit Current (A)	40/40	40/40	40/40	40/40	40/40	40/40	40/40
backfeed current to the array (A)	0	0	0	0	0	0	0	
Battery	Battery Type	Lithium battery (with BMS)						
	Battery communication mode	CAN / RS485						
	Battery voltage range (V)	135-800						
	Maximum charging current (A)	50						
	Maximum discharge current (A)	50						
Output (Grid)	Rated current of built-in fuse (A)	125						
	Rated Output Power (W)	15,000	17,000	20,000	25,000	29,900	30,000	33,000
	Max. Output Power (W)	16,500	18,700	22,000	27,500	29,900	33,000	36,300
	AC output rated apparent power (VA)	15,000	17,000	20,000	25,000	29,900	30,000	33,000
	Max. Apparent Power (VA)	16,500	18,700	22,000	27,500	29,900	33,000	36,300
	Max. Input Apparent Power (VA)	20,000 ^①	22,000 ^①	26,000 ^①	33,000 ^①	39,000 ^①	39,000 ^①	42,000 ^①
	Rated Output Voltage (V)	3L / N / PE, 230 (400)						
	Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
	AC output rated current (A)	21.7	24.6	29.0	36.2	43.3	43.5	47.8
	Max. Output Current (A)	25.0	28.3	33.3	41.7	49.8	50.0	55.0
	Power Factor	0.8 leading ...0.8 lagging						
Max. total harmonic distortion	<3% @Rated Output Power							
DCI	<0.5%In							
Output (Back-up)	Rated Output Power (W)	15,000	17,000	20,000	25,000	29,900	30,000	33,000
	Max. Output Power (W)	16,500	18,700	22,000	27,500	29,900	33,000	36,300
	Back-up output rated apparent power (VA)	15,000	17,000	20,000	25,000	29,900	30,000	33,000
	Max. Apparent Power (VA)	16,500	18,700	22,000	27,500	29,900	33,000	36,300
	Back-up output rated current (A)	21.7	24.6	29.0	36.2	43.3	43.5	47.8
	Max. Output Current (A)	25.0	28.3	33.3	41.7	49.8	50.0	55.0
	UPS switching time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
	Rated Output Voltage (V)	3L/N/PE, 230 (400)						
	Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
	Voltage harmonic distortion	<3% @Linear load						
	Efficiency	Max. Efficiency	98.1%	98.1%	98.1%	98.2%	98.2%	98.2%
European Efficiency		97.3%	97.3%	97.3%	97.4%	97.4%	97.4%	97.4%
MPPT Efficiency		99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Max battery charging conversion efficiency		97.2%	97.2%	97.2%	97.3%	97.3%	97.3%	97.3%
Max battery discharge conversion efficiency		97.2%	97.2%	97.2%	97.3%	97.3%	97.3%	97.3%

Protection		General Data	
DC Reverse Polarity Protection	Integrated	Over voltage category	PV: II ; Main: III
Battery input reverse connection protection	Integrated	Dimensions (mm)	600W*400H*280D
Insulation Resistance Protection	Integrated	Weight (KG)	45
DC Switch	Optional	Protection Degree	IP66
Surge Protection	Integrated	Self-consumption at Night (W)	<15
Over-temperature Protection	Integrated	Topology	Transformer less
Residual Current Protection	Integrated	Operating Temperature Range (° C)	-30~60
Islanding protection	Frequency shift, Integrated	Relative Humidity (%)	0~100
AC Over-voltage Protection	Integrated	Operating Altitude (m)	4000 (derating@ > 3000)
overload protection	Integrated	Cooling	Smart Fan Cooling
AC Short-circuit Protection	Integrated	Noise Level (dB)	<50
		Display	OLED & LED
		Communication	WiFi/LAN (Optional)

Compliance

