

HIGH VOLTAGE HYBRID INVERTER

(THREE PHASE)

ASG-(5-20)TL-ZH



KEY FEATURES



High Efficiency

- » 180-800V ultra-wide battery voltage range, compatible with more battery capacity
- » String current up to 18A
- » 2x prolonged off-grid overload capability



Smart

- » Supports grid-connected and off-grid three-phase unbalanced outputs, single-phase outputs up to 150%
- » Compatible with diesel generators, can control the generator automatically start and stop
- » Supports up to 16 off-grid parallel work



User-Friendly

- » A variety of operating modes can be selected, suitable for different application scenarios
- » <10ms UPS-level switching
- » 6 editable charge/discharge times
- » Smart Meter Phase Sequence Automatic Detection



Safe & Reliable

- » Supports I-V curve scanning, accurately identifying string anomalies
- » Intelligent AFCI reduces fire risk (Optional)



Economical & Cost-Saving

- » Supporting AC coupling and transforming PV grid-connected systems
- » Support for dynamic tariffs
- » Support for the "peak shaving" model

AUX GROUP

Established in 1986, AUX Group is an enterprise which covers 5 industries. It ranked China's top 500 enterprises for consecutive years, 40000+ employees keep AUX fast development for recent years.

40 Years History	\$11.8 Billion Revenue in 2025	5 Business Industries
\$9.6 Billion Assets	500 China's Top	40000+ Employees

AUXSOL

WIN A GREEN FUTURE TOGETHER

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	ASG-5TL-ZH	ASG-6TL-ZH	ASG-8TL-ZH	ASG-10TL-ZH	ASG-12TL-ZH	ASG-15TL-ZH	ASG-20TL-ZH
PV INPUT							
Max. PV access power	10kW	12kW	16kW	20kW	24kW	30kW	40kW
Max. PV input power	7.5kW	9kW	12kW	15kW	18kW	22.5kW	30kW
Max. input voltage	1000V						
Rated PV input voltage	600V						
Start-up voltage	160V						
MPPT voltage range	170-900V						
Max. PV input current	16A/16A			26A/26A		36A/36A	
Max. short circuit current	20A/20A			32A/32A		45A/45A	
MPPT number/Max. input strings number	2/2					2/4	
BATTERY							
Battery type	Lead-acid or Li-ion						
Battery voltage range	180-800V						
Number of battery input channels	1				2		
Max. charge/discharge current	30A/30A				2*30A/2*30A		
Communication	CAN/RS485						
Charging strategy for Li-Ion battery	Self-adaption to BMS						
AC OUTPUT							
Rated output power	5kW	6kW	8kW	10kW	12kW	15kW	20kW
Max. apparent output power	5kVA	6kVA	8kVA	10kVA	12kVA	15kVA	20kVA
Rated output current	7.3A	8.7A	11.6A	14.5A	17.4	21.7A	28.9A
Max. output current	11.4A	13.6A	18.2A	22.7A	27.3A	34.1A	45.5A
Rated output voltage	220V/380V,230V/400V,3L/N/PE						
Output voltage range	165-288V(Phase voltage),286-498V(Line voltage)						
Rated output frequency/ frequency range	50Hz/60Hz (±5Hz)						
Power factor	>0.99 (0.8 leading - 0.8 lagging)						
THDi	<3%						
AC INPUT							
Rated input Power	5kW	6kW	8kW	10kW	12kW	15kW	20kW
Max. input power	10kW	12kW	16kW	20kW	24kW	30kW	30kW
Max. input current	15.2A	18.2A	24.2A	30.3A	36.4A	45.5A	45.5A
Rated input voltage	220V/380V,230V/400V,3L/N/PE						
Rated input frequency	50/60Hz						
BACK-UP OUTPUT							
Rated output Power	5kW	6kW	8kW	10kW	12kW	15kW	20kW
Max. output current	7.6A	9.1A	12.1A	15.2A	18.2A	22.7A	30.3A
Max. output power	2 times of rated power, 10 s						
Rated output voltage	220V/380V,230V/400V,3L/N/PE						
Rated output frequency	50/60Hz						
Back-up switch time	<10ms						
THDv	<3%						
EFFICIENCY							
MPPT efficiency	99.80%						
Max. efficiency	97.34%						
EU efficiency	96.45%						
BAT charged/discharged Max. efficiency	97.35%						
PROTECTION							
Integrated DC switch	Yes						
DC reverse-polarity protection	Yes						
Insulation impedance detection	Yes						
Residual leakage current detection	Yes						
Ground fault monitoring	Yes						
Short circuit protection	Yes						
Anti-islanding protection	Yes						
DC/AC surge protection	DC:Type II;AC:Type II						
Battery reverse protection	Yes					/	
DC arc-fault circuit protection	Optional						
I/V curve scanning	Optional						
Parallel	Optional						
GENERAL							
Operating temperature range	-30 to +60 C						
Max. operation altitude	4000m(Derating above 3000m)						
Relative humidity	0~100%						
Cooling concept	Natural Cooling				Smart Fan Cooling		
Ingress protection	IP 66						
Topology	Transformerless						
Self consumption(night)	≤20W						
Dimensions (W*H*D)	561*520*232mm						
Weight	30.5kg		33.2kg		34.8kg	37.8kg	
Type of PV terminal	MC4 connector						
Type of AC terminal (Grid side)	Quick connection plug						
COMMUNICATION							
Display	LED+Bluetooth+APP(Optional:LCD)						
Communication	WIFI+Bluetooth,Optional:GPRS,LAN ;BMS:CAN/RS485						
CERTIFICATION							
Grid standards	EN 50549-1,IEC 61727/ 62116,IEC 61683,UNE 217001,UNE 217002,NTS-631, PTPIREE,NC RfG,VDE 4105,NA/EEA,TOR Erzeuger,ORDINANCE No.515,G98,G99						
Safety/EMC	IEC/EN 62109-1/2,IEC/EN 62477-1, EN IEC61000-6-1/2/3/4,EN IEC 61000-3-11/12						

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