

All-in-one Liquid-cooled Converter



Product Introduction

The liquid-cooled converter is mainly composed of AC distribution cabinet, liquid-cooled PCS, liquid-cooled unit and local controller. Adopting the modular PCS design concept, it can be applied to different technical lines of centralized and group series. A single converter is composed of 11 PCS liquid-cooled modules (the maximum support for installation of 12 PCS) to form a 2.5MW converter system, covering 1000V-1500V DC voltage level, and it can be composed of 2 (5MW) or more parallel network for use.

Product Features



High Efficiency

- PCS is designed with all SiC power devices, with maximum efficiency greater than 99.2%.



High-level Safety

- The PCS adopts liquid-cooled mode to dissipate heat, reducing the risk of temperature control. The system protection is IP55, and the PCS protection level is IP66, which can adapt to various extreme conditions.



Flexible Configuration

- PCS modular design, can choose centralized or string architecture, flexible configuration 2.5MW/5MW or different power levels, to meet the needs of multiple scenarios.



Low Noise

- The system noise is less than 65dB, which is suitable for various applications with high noise requirements and improves user experience.

Form	Product Parameters	
DC Side Parameters	Voltage ranges	1000~1500Vdc
	Maximum DC voltage	1500Vdc
	Maximum current on DC side	11*259A
AC Side Parameters (grid-connected)	Rating power	2.5MW
	Rated grid voltage	35kV
	Allowable grid voltage	-15%~10%
	Rated grid frequency	50Hz
	Allowable grid fluctuation frequency	±5Hz
	Power factor	> 0.995 (Rating power)
	Power factor adjustable range	-1~1
	Current harmonics	< 3% (Rating power)
AC Side Parameters (off-grid)	Rating power	2.5MW
	Rated output voltage	690Vac
	Rated output frequency	50Hz
	AC voltage harmonics	< 3% (linear load)
	Load power factor	-0.8~0.8
System Parameters	Maximum converter efficiency	≥99.2%
	Converter cooling method	liquid-cooled
	Charge/discharge conversion time	< 100ms
	Protection level	IP55 (Converter IP66)
	Permissible ambient temperature	-30°C~+60°C (> 50°C derating, up to 2000m above sea level)
	Allowable relative humidity	0~100%
	Maximum working altitude	5000m (> 4000m derating, ambient temperature environment)
	Noise	≤65dB
	System full load efficiency	≥98 %
System Communications	Communication interface	RS485/CAN/Ethernet
	Communication protocols	IEC61850/IEC104/Modbus TCP/RTU/MQTT
Mechanical Parameters	Weights	≤4t
	Dimensions (W×D×H)	≤3800mm*1100mm*2200mm
	Installation method	Ground-mounting
	Wiring method	Bottom Entry/Exit