

# 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