

100~125kW Mars (Liquid Cooling) Series High-Protection PCS Module for Commercial and Industrial BESS



+ Advantages

High Efficiency and Intelligence

- Efficient harmonic suppression algorithm
- Liquid cooling design for more uniform heat dissipation
- Three-level topology with up to 99% conversion efficiency
- IP65 high protection level
- Module operating noise <60dB

Flexible Application

- Support 8 sets of modules co-DC
- Support 32 sets of modules co-AC
- 4U standard modular design
- Support UPS, DVR, and SVG
- Support 100% imbalance load in off-grid mode

Grid-Friendly

- Support high and low voltage ride-through
- Stable operation in weak grid conditions
- Grid-forming on-grid technology

Specifications	Mars-100KT-LP	Mars-110KT-LP	Mars-125KT-LP
DC side			
Max. DC voltage	1000V	1000V	1000V
Min. DC voltage	580V	580V	580V
DC voltage working range	580~1000V	580~1000V	580~1000V
Max. DC current	173A	190A	216A
AC side (on-grid)			
Rated charge and discharge power	100kW	110kW	125kW
Max. charge and discharge power	120kW	132kW	150kW
Rated charge and discharge current	145A	160A	182A
Rated grid voltage	400V	400V	400V
Allowed grid voltage range		300~460V	
Rated grid frequency		50Hz/60Hz	
Total harmonic distortion of current		<3%(at rated power)	
Power factor		>0.99	
Power factor range		-1~1	
Overload capability		1.2Pn,last for 1 minute	
AC side (off-grid)			
AC side (off-grid)		400V	
Voltage deviation		±2%	
Total harmonic distortion of voltage		<3%(linear load)	
Efficiency			
Max. efficiency		99.0%	
Protection			
DC RCP		Yes	
AC SCP		Yes	
AC output OCP		Yes	
Surge protection		Type II	
Insulation resistance detection		Yes	
Temperature protection		Yes	
DC switch		Yes	
General			
Dimensions (W*H*D)		505mm*245mm*875mm	
Weight		<75kg	
Topology		Transformerless	
Working temperature		-40~+60°C	
IP level		IP65	
Cooling method		Liquid cooling	
working altitude		4000m (derating above 3000m)	
Standby power consumption		<12W	
Characteristics			
DC connector		Frant Exit Quick-Connect Terminal	
AC connector		Frant Exit Quick-Connect Terminal	
Display		LED	
Communication mode		Ethernet, RS485, CAN	