

# Mars series converter modules of industrial and commercial energy storage



## + Features

### 👍 Efficient and intelligent

- Efficient harmonic suppression algorithm
- Intelligent multi-level speed-adjustable fan control
- Three-level topology, up to 98.8 % conversion efficiency

### 👉 Flexible

- Support 8 sets of modules co-DC
- Support 32 sets of modules co-AC
- Design comply with 3U standard
- Support UPS、DVR、SVG
- Support 100% imbalance load in off-grid mode

### 🔗 Grid-friendly

- Support high and low voltage ride through
- Support stable operation of weak grid
- Grid-forming on-grid technology

Specifications	Mars-50KT	Mars-60KT
<b>DC side</b>		
Max. DC voltage	1000V	1000V
Max. DC voltage	580V	580V
DC voltage working range	580-1000V	580-1000V
Maximum current on DC side	87.5A	105A
<b>AC side(on-grid)</b>		
Rated charge and discharge power	50kW	60kW
Maximum charge and discharge power	60kW	72kW
Rated charge and discharge current	72.5A	87A
Rated grid voltage	400V	
Allowed grid voltage range	300-440V	
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 one minute	
<b>AC side(off-grid)</b>		
Rated output voltage	400V	
Voltage deviation	± 2%	
Total harmonic distortion of voltage	<3%(linear load)	
<b>Efficiency</b>		
Maximum efficiency	98.80%	
<b>Protection</b>		
DC RCP	YES	
AC SCP	YES	
AC output OCP	YES	
Surge Protection	Level 2	
Insulation resistance detection	YES	
Temperature protection	YES	
DC switch	YES	
<b>General</b>		
Dimensions(W*H*D)	445mm*130mm*570mm	
Weight	<32kg	
Topology	no transformer	
Working temperature	-40~+60°C full power operation below 45 °C	
IP level	IP20 (PACK integration of module and battery, system protection level: IP54 or higher)	
Cooling method	Intelligent air cooling	
Working altitude	<4000m (Derating above 3000m)	
Standby power consumption	<10W	
<b>Characteristics</b>		
DC connector	OT terminal	
AC connector	OT terminal	
Display	LED	
Communication mode	Ethernet, RS485、CAN	