30kW Mars Series Wide-range PCS Module for Commercial and Industrial BESS

Specifications	Mars-30KT-W
DC side	
Max. DC voltage	880v
Min. DC voltage	150V
DC voltage working range(full load)	150~880V(340~880V Full power)
Max. DC current (long-term operation)	90A
AC side (on-grid)	
Rated charge and discharge power	30kW
Max. charge and discharge power	36kW
Rated charge and discharge current	44A
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
AC side (off-grid)	
Rated output voltage	400V
Voltage deviation	±2%
Total harmonic distortion of voltage	<3%(linear load)
Efficiency	
Max. efficiency	97.2%
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)	445mm*130mm*570mm
Weight	<31kg
Topology	Transformerless
Working temperature	-40~+60℃ full power operation at or below 45℃
IP level	IP20
Cooling method	Intelligent air cooled
Max. working altitude	<4000m (derating above 3000m)
Standby power consumption	<10W
Characteristics	
DC connector	Rerr Exit OT terminal
AC connector	Rerr Exit OT terminal
Display	LED
Communication mode	Ethernet、RS485、CAN

+ Advantages

☑ Perfect Compatibility

- Built-in DC/DC circuitry supporting DC voltage from 150~ 880V

👍 High Efficiency and Intelligence

- Efficient harmonic suppression algorithm
- Intelligent multi-level fan speed control
- Three-level topology with up to 97.2% conversion efficiency

☑ Flexible Application

- Support 8 sets of modules co-DC
- Support 32 sets of modules co-AC
- 3U 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