

500kW BESS PCS

TPCS-500-G



Product Overview

The 500kW PCS is powerful AC/DC bidirectional conversion device designed for BESS.



Supporting multiple machine parallel connection, meeting the requirements of different power levels



Flexible configuration with different capacity requirements



-25°C to 55°C



Multiple control modes, free choice



harsh conditions such as high humidity and salt spray



Integrated EMS, intelligent management



Frequency support; Voltage support
Inertia support



Model	TPCS-500-G
DC parameter	
Maximum operating voltage	1000V
Minimum operating voltage	570V
Full-load voltage range	600V~850V
Maximum input current	916A
AC On Grid Parameter	
Rated output power	500kW
Maximum apparent power	550kVA
AC rated voltage	400V
AC rated frequency	50Hz/60Hz
Maximum output current	721A
Maximum overload capacity	793A
Maximum overload capacity	110% overload (long term), 120% overload (lmin)
AC voltage range	85%U _n ~110%U _n
AC frequency range	45-55Hz/55-65Hz (settable)
Maxmuim Current Total Harmonic Distortion	<3%
DC component of current	<0.5% of rated output current
Power factor	-1 (advance)~ 1 (lag)
Reactive power controllable range	-100%~100%
Isolation method	none
AC system	3W+PE
Operation Mode	Only on grid operation is permitted
Efficiency	
Maximum efficiency	99.0%
Basic parameters	
Dimensions (W X H X D)	1216mm X 850mm X 2054mm
Weight	1200kg
Permissible operating temperature range	-25°C~55°C (over 45 °C, it will operate in derating)
Cooling method	Forced air cooling
Protection Grade	IP20
Relative humidity	≤95%RH, non-condensing
Highest Altitude	4000 m (over 2000 m, it will operate in derating)
Self power consumption in shutdown	<50W
HMI	Touch Screen
Communication Interface	RS485, Ethernet, CAN
Support protocols	Modbus TCP, Modbus RTU