

630kW BESS PCS

TPCS-630



Product Overview

The 630kW PCS is a powerful AC/DC bidirectional conversion device designed for BESS.

- Built-in isolation transformer, directly with three-phase 100% unbalanced load
- Frequency support; Voltage support
Inertia support
- 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



Model	TPCS 630
DC parameters	
Maximum operating Voltage	1000V
Minimum operating Voltage	570V
Full-load voltage range	600~850V
Maximum input current	1155A
Grid-connected AC parameter	
Rated output power	630kW
Maximum output power	693kW
AC rated voltage	400V
AC rated frequency	50Hz/60Hz
Rated output current	909A
Maximum output current	1000A
Maximum overload capacity	110% overload (10 min), 120% overload (1 min)
AC voltage range	85%Un~110%Un
AC frequency range	45~55Hz/55~65Hz(settable)
THDi	<5%(Rated power)
DC component of current	<0.5% of rated output current
Power factor	-0.99 (advance)~ 0.99 (lag)
Reactive power controllable range	-100%~100%(transformer required)
Isolation method	none
AC System Wiring Type	3W+N+PE
Off-grid AC parameter	
AC rated voltage	400V
AC rated frequency	50Hz/60Hz
THDu	<3% (Linear load)
DC component of voltage	0.5%Un (linear balanced load)
Load capacity of unbalance load	100%
Voltage variation range	<3%Un
Grid-connection and off switch mode	
Grid-connection and off switch capacity	Planned off-grid
Passive off-grid switching mode and switching time	<10 ms with switching cabinet
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	≤4000m (Derated above 2000m)
Self power consumption in shutdown	<50W
HMI	Touch Screen
Communication Interface	RS485, Ethernet, CAN
Support protocols	Modbus TCP, Modbus RTU