

30kW Modular PCS

TPCS-30M



Product overview

The 30kW modular PCS is a powerful AC/DC bidirectional conversion device designed for BESS.



Three-phase four-wire system, directly with three-phase 100% unbalanced load



Modular design, easy to install and maintain



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



Flexible configuration for 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-30M
DC parameter	
Maximum operating voltage	900V
Minimum operating voltage	50V
Full load voltage range	300V~850V
Maximum input current	113A
Grid-connected AC parameter	
Rated output power	30kW
Maximum output power	33kW
AC rated voltage	400V
AC rated frequency	50Hz/60Hz
Rated Output current	43A
Maximum output current	48A
Maximum overload capacity	110%overload (long-term), 120%overload (1min)
AC voltage range	$85\%U_N$ ~ $110\%U_N$
AC frequency range	45~55Hz/55~65Hz (settable)
Maximum Current Total Harmonic Distortion	<3%
DC component of current	<0.5% rated output current
Power factor	-0.99(advance)~0.99 (lag)
Reactive power controllable range	-100%~ 100%
Isolation method	none
AC system	3W+N+PE
Off-grid AC parameter	
AC rated voltage	400V
AC rated frequency	50Hz/60Hz
Maximum Voltage Total Harmonic Distortion	<3% (linear load)
DC component of voltage	<0.5% U_n (linear balanced load)
Load capacity of unbalance load	100%
Voltage variation range	<3% U_N
Grid-connection and offswitch mode	
Grid-connection and offswitch capacity	Planned off-grid, passive off-grid
Passive off-grid switching mode and switching time	Built-in static switch,<10 ms
Efficiency	
Maximum efficiency	97%
Basic parameters	
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	≤90%RH, non-condensing
Highest Altitude	4000 m (over 2000 m, it will operate in derating)
Self power consumption in shutdown	<20W
HMI	Touch Screen
Communication Interface	RS485, Ethernet, CAN
Support protocols	Modbus TCP, Modbus RTU