



ENERGY STORAGE SYSTEM

PSWD on-grid and off grid switch cabinet system



Product introduction:

The PSWD on-grid and off-grid switch cabinet system consists of AC power distribution cabinet, photovoltaic inverter (optional), local load and energy storage converter to form a set of AC micro-grid system. The microgrid switching cabinet can work in different modes as required.

The PSWD on-grid and off-grid switching cabinet plays a central role in the whole system, with the characteristics of energy dispatch management, fast on-grid and off-grid switching and convenient maintenance. At the same time, it has perfect protection functions, such as over temperature, AC over and under voltage, AC reverse sequence, emergency shutdown, fan failure, output overload, etc., to meet the requirements of off-grid operation. The micro-grid switching cabinet includes on road power grid input.

When the thyristor of the micro-grid switching cabinet breaks down, the bypass switch can be closed for emergency power supply. Note: the bypass switch and the grid switch cannot be closed at the same time. The microgrid switching cabinet includes a PCS switch, which is specially used to connect the energy storage converter. It is equipped with four load switches at most, and can be optionally connected to photovoltaic grid-connected inverters, wind turbines, diesel generators and local loads. The external communication of the switching cabinet includes RS485, and the Ethernet can exchange data with the background PC to form an energy management system, which can dispatch and manage energy and switch between on-grid and off-grid.

Model	PSWD-800KW
Rated power (KW)	800400
Rated voltage (V)	-25%~15%
Input voltage range	-25%~15%
Output voltage range	1155
Rated input current (A)	1270 (1.1 times)
Maximum input current (A)	50/60
Rated frequency (Hz)	47~52/57~62
On and off grid switching time	<20ms
Overall efficiency	99.5% (full load)
Protection class	IP20
Design life	10 years
Cooling method	air cooling
Grid access	1 road
PCS/PV access	1 road (not more than 500KW)
Load access	4 roads
Maximum load switching power (KW)	300 (RCD load, pure capacitive or inductive load is less than 100)
Wiring	Three phases four wires system
Protection	Protection for over temperature, AC over and under voltage, AC reverse sequence emergency shutdown, fan failure, output overload, etc.
Host computer communication method	ModBus TCO/IP protocol
Communication Interface	Ethernet port/ RS485
Cabinet size (D*W*H) mm	800*800*2160
Noise	70dB
Temperature range (°C)	-20~45
Altitude (m)	3000
Humidity	0-95%
Weight (KG)	300

Introduction of PSTS Microgrid Controller:

The micro-grid controller (PSTS) consists of four parts: fast switching, high-precision detection, login control, and external communication. It can automatically complete on-off-grid switching and on-grid synchronization. The active switching and off-grid time is 0ms, the passive switching time is 20ms (typical), and the switching can be realized within 5ms through customization (at this time, the system mainly guarantees the power supply waveform).

Project	PSTS-100KW	PSTS-200KW	PSTS-300KW	PSTS-800KW
Input voltage range (VAC)	340-460	340-460	340-460	340-460
Rated output voltage(V)	400	400	400	400
Rated output current (A)	153	306	459	1215
Communication method	CAN			
Size (D*W*H) mm	220*585*482			800*800*2160