

STS Series

The Static Transfer Switch (STS) Box is a cutting-edge switching solution designed for use in commercial and industrial energy storage systems. This system enables precise control of inverters, allowing seamless transitions between grid-tied and off-grid modes. In the event of a grid outage, the inverter seamlessly switches to off-grid mode, providing power to critical loads through solar panels or batteries. When grid power is restored, the inverter smoothly transitions back to grid-tied operation. The STS is versatile, supporting connections with generators and accommodating large loads such as heat pumps and motors. During grid-tied operation, the STS supports a maximum load capacity of 138kW (200A) for the backup interface. This robust solution ensures continuous and reliable power supply, offering flexibility and efficiency in energy management.



Paired with ET 25-50kW for UPS-level and off-grid switching



Supports the connection and control of large loads



Supports control of diesel generator integration



IP65 ingress protection for outdoor installations

Technical Data		STS200-80-10
Electrical Data		
Nominal Output Voltage (V)	380 / 400, 3L / N / PE	
Output Voltage Range (V)	176 ~ 276	
Nominal AC Frequency (Hz)	50 / 60	
AC Frequency Range (Hz)	45 ~ 65	
Inverter Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power (VA) ^{*1}	50000	
Nominal Current (A) ^{*5}	72.5	
Max. Current (A) ^{*26}	75.8	
Grid Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power (VA) ^{*3}	50000	
Nominal Current (A) ^{*5}	72.5	
Max. Current (A) ^{*46}	75.8	
Back-up Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power without Grid (VA)	55000	
Max. Apparent Power with Grid (VA)	138000	
Nominal Current (A) ^{*5}	72.5	
Max. Current (A) ^{*47}	83.3	
Generator / PV inverter Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power (VA)	55000	
Nominal Current (A) ^{*5}	72.5	
Max. Current (A) ^{*7}	83.3	
Other Electrical Data		
Nominal Current of AC Side Relay (A)	200	
Nominal Current of Generator Side Relay (A)	90	
Switch Time (ms)	<10	
General Data		
Operating Temperature Range (°C)	-35 ~ +60	
Max. Operating Altitude (m)	4000	
Cooling Method	Natural Convection	
Communication with Inverter	RS485	
Weight (kg)	16.5	
Dimension (W × H × D mm)	510 × 425 × 156	
Mounting Method	Wall Mounted	
Topology	Non-isolated	
Ingress Protection Rating	IP65	
Certification		
Safety Regulation	IEC62109-1 / -2	
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4	

*1: When the inverter is operating in the off-grid state, Max. Apparent Power of Inverter Side can be reached 55kW.
 *2: When the inverter is operating in the off-grid state, Max. Current of Inverter Side can be reached 83.3A.
 *3: Max. Input Power at grid port (purchased power) 138kW.

*4: Max purchases current of gid side and back up side can be reached at 200A.
 *5: When Nominal Output Voltage is 380V, the Nominal Current is 75.8A.
 *6: When Nominal Output Voltage is 400V, the Max. Current is 72.5A.
 *7: When Nominal Output Voltage is 400V, the Max. Current is 79.7A.
 *: Please visit GoodWe website for the latest certificates.

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