

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 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)	72.5	
Max. Current (A) ^{*2}	75.8	
Grid Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power (VA)	50000	
Nominal Current (A)	72.5	
Max. Current (A)	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)	72.5	
Max. Current (A) ^{*3}	83.3	
Generator / PV inverter Side Data		
Nominal Apparent Power (VA)	50000	
Max. Apparent Power (VA)	55000	
Nominal Current (A)	72.5	
Max. Current (A)	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	Smart Fan Cooling	
Communication with Inverter	RS485	
Weight (kg)	17.5	
Dimension (W × H × D mm)	510 × 425 × 156	
Mounting Method	Wall Mounted	
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. When the grid is on, the Max. Current of Backup side can be reached 200A.

*: Please visit GoodWe website for the latest certificates.