

# 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

<b>Technical Data</b>		<b>STS200-80-10</b>
<b>Electrical Data</b>		
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
<b>Inverter Side Data</b>		
Nominal Apparent Power (VA)		50000
Max. Apparent Power (VA) <sup>*1</sup>		50000
Nominal Current (A) <sup>*5</sup>		72.5
Max. Current (A) <sup>*2*6</sup>		75.8
<b>Grid Side Data</b>		
Nominal Apparent Power (VA)		50000
Max. Apparent Power (VA) <sup>*3</sup>		50000
Nominal Current (A) <sup>*5</sup>		72.5
Max. Current (A) <sup>*4*6</sup>		75.8
<b>Back-up Side Data</b>		
Nominal Apparent Power (VA)		50000
Max. Apparent Power without Grid (VA)		55000
Max. Apparent Power with Grid (VA)		138000
Nominal Current (A) <sup>*5</sup>		72.5
Max. Current (A) <sup>*4*7</sup>		83.3
<b>Generator / PV inverter Side Data</b>		
Nominal Apparent Power (VA)		50000
Max. Apparent Power (VA)		55000
Nominal Current (A) <sup>*5</sup>		72.5
Max. Current (A) <sup>*7</sup>		83.3
<b>Other Electrical Data</b>		
Nominal Current of AC Side Relay (A)		200
Nominal Current of Generator Side Relay (A)		90
Switch Time (ms)		<10
<b>General Data</b>		
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
<b>Certification</b>		
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 grid 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.