

GOODWE

STS Series

30kW/60kW | Static Transfer Switch

The Residential Static Transfer Switch (STS) is an intelligent switching solution designed for the ESA Series All-in-One energy storage system, supporting both single-phase and three-phase applications. It enables fast and seamless transitions between grid-connected and backup operation, ensuring uninterrupted power supply for essential household loads. During grid outages, the STS enables seamless transfer of critical loads to the ESA system and smooth reconnection once grid power is restored, enhancing home energy resilience, reliability, and energy independence.



<4ms Seamless Switching,
No Load Disruption



Up to 100A Bypass Current,
Whole-Home Backup Ready



High-Power Load Support,
Fast Response, Stable Power



Flexible Integration with ESA All-in-One
(Single & Three-Phase)



Automatic Generator Control,
Smarter Off-Grid Backup



Simplified Installation,
Lower System Cost

Technical Data		GW30K-STS-G10	GW60K-STS-G10
Grid side			
Nominal Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE		
Voltage Range (V)	114 ~ 280 (according to local standard)		
Nominal Frequency (Hz)	50 / 60		
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Rated. Current (A)	45.5 @ 380V 43.5 @ 400V 41.6 @ 415V	91.0 @ 380V 87.0 @ 400V 83.4 @ 415V	
Max. Current (A)	63	100	
Rated Power (kW)	30	60	
Back-up side			
Nominal Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE		
Voltage Range (V)	114 ~ 280 (according to local standard)		
Nominal Frequency (Hz)	50 / 60		
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Rated. Current (A)	45.5 @ 380V 43.5 @ 400V 41.6 @ 415V	91.0 @ 380V 87.0 @ 400V 83.4 @ 415V	
Max. Current (A)	63	100	
Rated Output Power (kW)	30	60	
Max. Bypass Current (A)	63	100	
Smart Port side			
Nominal Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE		
Voltage Range (V)	114 ~ 280 (according to local standard)		
Nominal Frequency (Hz)	50 / 60		
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Rated. Current (A)	45.5 @ 380V 43.5 @ 400V 41.6 @ 415V	91.0 @ 380V 87.0 @ 400V 83.4 @ 415V	
Max. Current (A)	63	100	
Rated Power (kW)	30	60	
Inverter side			
Nominal Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE		
Voltage Range (V)	114 ~ 280 (according to local standard)		
Nominal Frequency (Hz)	50 / 60		
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65		
Rated. Current (A)	45.5 @ 380V 43.5 @ 400V 41.6 @ 415V		
Max. Current (A)	63		
Rated Power (kW)	30		
General Data			
On / Off Grid Transfer Time (ms)	≤4		
Operating Temperature Range (°C)	-35 ~ +60		
Relative Humidity	0 ~ 100%		
Max. Operating Altitude (m)	4000		
Cooling Method	Natural Convection		
Communication	RS485		
Weight (kg)	12.5	15	
Dimension (W × H × D mm)	506 × 590 × 180		
Mounting Method	Wall Mounted		
Noise Emission (dB)	35		
Ingress Protection Rating	IP54		
Anti-corrosion Class	C4L		
Overvoltage Category	III		
Protective Class	I		
Certification			
Safety Regulation	IEC 61439-1, IEC 61439-2 EN 61439-1, EN 61439-1		

*: Please visit GoodWe website for the latest certificates.