

STS Cabinet 125–1000 kW

125–1,000 kW |



What is the STS Cabinet? The STS cabinet (250NL / 500NL / 1000NL) is a static transfer switch for hybrid PV-storage-diesel systems: it synchronizes and transfers between grid and off-grid modes in 0 ms actively (< 20 ms passively), connects 2 to 8 storage systems (125 kW × N) and coordinates PV-storage-diesel power allocation intelligently. Built-in UPS and an optional ATS input port simplify distribution design.

125–1,000 kW

Rated Range

0 ms

Active Switching

Up to 8

Storage Systems

IP54

Protection Class

KEY FEATURES

- ✓ Automatic Transfer
Automatic grid/off-grid switching and synchronization; compatible with VSG grid-forming, seamless transition for all diesel generator types.
- ✓ Fast Switching
Active grid/off-grid switching time 0 ms; passive switching < 20 ms.
- ✓ Distribution Friendly
Built-in UPS for auxiliary power supply; optional ATS input port for flexible configuration.
- ✓ Smart Coordination
Intelligent scheduling for optimal power allocation of the PV-storage-diesel system.

TECHNICAL SPECIFICATION

Parameter	250NL	500NL	1000NL
Storage Port			
Max Connected Storage Systems	2	4	8
Rated Storage System Power	125 kW × 2	125 kW × 4	125 kW × 8
Grid Port			
Rated Power	250 kW	500 kW	1000 kW
Rated Voltage	400 VAC	400 VAC	400 VAC
Connection	3W+N+PE	3W+N+PE	3W+N+PE
Grid Voltage Range	–15% ~ +15%	–15% ~ +15%	–15% ~ +15%
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Load Port			
Rated Power	250 kW	500 kW	1000 kW
Grid/Off-Grid Switching Time	< 20 ms	< 20 ms	< 20 ms
Recommended Max Load Power	70% × storage system power	—	—
Diesel Generator Port			
DG ATS	Optional ATS (DG connects to grid port when no grid available)	—	—
System			

Parameter	250NL	500NL	1000NL
Dimensions (W×D×H)	800 × 1200 × 1800 mm	1000 × 1200 × 1800 mm	1250 × 1200 × 2200 mm
Weight	500 kg	620 kg	750 kg
Protection Rating	IP54	IP54	IP54
Cooling Method	Air cooling	Air cooling	Air cooling
Communication	RS485 / Modbus TCP-IP	—	—
Operating Temperature	-15 °C ~ 45 °C	—	—
Operating Altitude	4000 m (derated above 2000 m)	—	—

Models 250NL / 500NL / 1000NL — automatic grid/off-grid transfer with synchronization; full datasheet available on request.
Specifications are subject to change without notice.