Energy Independence for your Home

swelect
Powering the world responsibly

Power your home, store surplus solar energy and use it when needed — for greater savings and reliable backup.

SWEES EN+

3-6 kW Single Phase Low Voltage **Hybrid Inverter**



BIS REGISTERED



SUGGESTED COMPATIBLE BATTERY STORAGE
SWEES ES+
5.12 kWh Wall-Mount / Floor-Mount
Scalable up to 300 kW* with 6 Units in parallel

PRODUCT FEATURES

Higher Efficiency
More power, less energy loss.
Up to 97.6% efficiency with advanced SiC technology.

Seamless Switching
Uninterrupted power for essential appliances.
4 ms grid-to-backup and 0 ms backup-to-grid switching.*

Wide Voltage Range
Reliable performance during grid fluctuations.
Supports 184–276V AC input and 45–65Hz frequency.

Wide PV Solar Input
Maximise solar power, even during power cuts.
150–200% PV input, 18A current and dual MPPTs for efficient solar harvesting.

Overload Capability
Handles sudden peak loads with ease.
130–260% overload capacity for up to 10 seconds.*

Broad Compatibility
Reliable performance even with weak or fluctuating grid supply. Supports AC coupling and stable operation during voltage fluctuations.

*Switching times are based on specified test conditions and may vary depending on load and system configuration.

One-Stop Solution Provider For Solar & Energy Storage Projects

+91 91760 01012 enquiries@swelectes.com
www.swelectes.com

Celebrating 40+ years

Technical Specifications

Single-Phase Hybrid Inverter | 3-6 kW

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Model Name	SWEES EN+ 3K-1LD	SWEES EN+ 4K-1LD	SWEES EN+ 5K-1LD	SWEES EN+ 6K-1LD
Off-Grid Output				
Rated Output Power	3 kW	4 kW	5 kW	6 kW
Rated Output Current	13.6 A	18.2 A	22.7 A	27.2 A
Peak Power & Duration	7.8 kVA –1 s / 9 kVA – 100 ms			
Rated Voltage	220 V / 230 V / 240 V			
Rated Frequency	50 / 60 Hz			
THDu	< 2%			
On-Grid Parameters				
Rated Output Power	3 kW	4 kW	5 kW	6 kW
Max. Output Current	13.6 A	18.2 A	22.7 A	27.2 A
Max. Grid Input Current	50 A			
Rated On-Grid Voltage	220 V / 230 V / 240 V			
Grid Voltage Range	184 – 276 V			
Frequency Range	45 – 65 Hz			
PV Input				
Recommended Max. PV Installation Power	11,250 Wp			
Max. Input Power	9,000 Wp			
Startup Voltage	80 V			
Max. Input Voltage	500 V			
MPPT Voltage Range	65 – 500 V			
Number of MPPT	2			
No. of Strings per MPPT	1			
Rated Voltage	360 V			
Max. Input Current	18 A / 18 A			
Short-Circuit Current	22 A / 22 A			
Battery Parameters				
Battery Type	Lithium-ion / Lead-acid / Sodium-ion			
Rated Voltage	51.2 V			
Battery Voltage Range	30 – 60 V			
Max. Charge/Discharge Current	125 A			
Generator Parameters				
Max. Input Current	50 A			
Rated Output Voltage	L / N / PE, 220 V / 230 V / 240 V			
Voltage Range	184 – 276 V			
Efficiency				
Max. Efficiency	97.5%	97.6%		
European Efficiency	97.2%			
Max. Battery Charge/Discharge Efficiency	94%			
General Data				
Dimensions (W × H × D)	325 × 480 × 221.5 mm			
Weight	21 kg			
Noise Level	< 45 dB(A)			
Operating Temperature	–25°C to +60°C (> 45°C Derating)			
Operating Altitude	4,000 m (Derating above 3,000 m)			
Cooling Type	Intelligent Air Cooling			
IP Rating	IP65			
HMI Mode	LCD / App / Wi-Fi / Bluetooth / 4G / LAN			
Communication Interface	RS485 / CAN / DO / Parallel Port			
Protection	DC Switch; Overload / Over-voltage Protection; AC Short-Circuit Protection; Anti-Islanding Protection; Residual Current Detection; Over-voltage Category: AC side: Category III, Battery & PV: Category II; Surge Protection; Lightning Protection: Type II; Reverse-Insertion Protection (PV & Battery)			
Standards & Compliance				
	IS 16221 (Part 2): 2015 / IEC 62109-2: 2011, IS 16169: 2019 / IEC 62116: 2014 and IS 17980: 2022 / IEC 62891: 2020			

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SCAN FOR CATALOUGE

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