swelect
Powering the world responsibly

Energy Independence for your Villas and Mansions

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

SWEES EN+

10–20 kW Three Phase High Voltage **Hybrid Inverter**



BIS REGISTERED



SUGGESTED COMPATIBLE BATTERY STORAGE

23.04 kWh High-Voltage Battery Solution

Expandable up to 276.48 kWh

PRODUCT FEATURES

Higher Efficiency
More power, lower energy losses. Up to 98.2% efficiency with advanced SiC technology

Parallel Operation
Expand power capacity as your needs grow.Supports up to 6 units in parallel (off-grid mode).

Battery Compatibility
Add battery storage without replacing your existing battery. Supports lithium and lead-acid batteries through two independent ports.

Wide PV Solar Input
Maximise solar utilisation, even in low sunlight. 150–200% PV input, 25A PV current and dual MPPTs.

Overload Capability
Handle temporary peak and surge loads with confidence. Supports 110% overload capacity.

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

One-Stop Solution Provider For Solar & Energy Storage Projects

Celebrating 40+ years

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

Technical Specifications

Three-Phase Hybrid Inverter | 10-20 kW

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Model Name	SWEES EN+ 10K-3H	SWEES EN+ 12K-3H	SWEES EN+ 15K-3H	SWEES EN+ 20K-3H
Off-Grid Output				
Rated Output Power	10 kW	12 kW	15 kW	20 kW
Peak Power and Duration	11 kVA – 60 s	13.2 kVA – 60 s	16.5 kVA – 60 s	22 kVA – 60 s
Rated Output Current	15 A	18 A	22.5 A	30 A
Rated Voltage	3/N/PE, 220/380 Vac, 230/400 Vac			
Rated Frequency	50 / 60 Hz			
Total Harmonic Distortion (THD)	< 3%			
On-Grid Parameters				
Rated Output Power	10 kW	12 kW	15 kW	20 kW
Maximum Grid Input Power	20 kVA	24 kVA	30 kVA	40 kVA
Maximum Grid Input Current	29 A	35 A	44 A	58 A
Maximum Output Current	16 A	20 A	24 A	32 A
Rated Grid Voltage	3/N/PE, 220/380 V, 230/400 V, 240/415 V			
Grid Voltage Range	184 – 276 V / 320 – 480 V			
PV Input				
Recommended Maximum PV Installation Power	25 kWp	30 kWp	37.5 kWp	37.5 kWp
Maximum Input Power	20 kWp	24 kWp	30 kWp	30 kWp
Maximum Input Voltage	1,000 V			
Number of MPPTs	2			
Maximum Strings per MPPT	2			
MPPT Voltage Range	130 – 960 V			
Rated Voltage	600 V			
Startup Voltage	200 V			
Maximum Input Current	25 A / 25 A			
Short-Circuit Current	30 A / 30 A			
Battery Parameters				
Battery Type	Lithium-ion / Lead-acid / Sodium-ion			
Number of Battery Inputs	2			
Battery Voltage Range	125 – 800 V			
Battery Charge/Discharge Current	25 A × 2			
Peak Charge/Discharge Current and Duration	35 A × 2 – 60 s			
Efficiency				
Maximum Efficiency	98.2%			
European Efficiency	97.7%			
Maximum Battery Charge/Discharge Efficiency	97.8%			
General Data				
Dimensions (W × H × D)	573 × 509 × 219 mm			
Weight	35 kg			
Noise Level	< 45 dB(A)			
Operating Altitude	5,000 m (> 3,000 m Derating)			
Operating Temperature	–25 °C ~ 60 °C (> 40 °C Derating)			
Cooling Type	Natural convection			
IP Rating	IP65			
HMI Mode	LED / 4G / WiFi / RS485 / Bluetooth			
Communication Interface	CAN /RS485 / DRED / Dry Contact / Parallel Port			
Protection	DC Switch; Overload / Over-voltage Protection; AC Short-circuit Protection; Anti-islanding Protection; Residual Current Detection; Surge Protection; Lightning Protection; TYPE II ; Reverse-insertion Protection (PV & Battery)			
Standards & Compliance				
Standards	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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Ver: 18.11.26