

8-18k Three Phase Low Voltage Energy Storage Inverter

8K/10K/12K/15K/18K | Low Voltage

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization
- Built-in control for SG-ready heat pumps

High Performance

- Switching time < 10ms
- 160% PV input capacity to maximize solar energy utilization
- Supports three-phase unbalanced output, allowing up to 50% of rated inverter power per phase

Flexible & Scalable

- Compatible with mainstream lithium and lead-acid batteries
- Easily expand system capacity using parallel connections and AC coupling

Simple & Fast Configuration

- Bluetooth app support for quick and easy setup
- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components



TECHNICAL SPECIFICATION

Models	8K	10K	12K	15K	18K
Input DC (PV side)					
Recommended max. PV array size	16 kW	20 kW	24 kW	30 kW	36 kW
Max. usable PV input power	12.8 kW	16 kW	19.2 kW	24 kW	28.8 kW
Max. input voltage	1000 V				
Rated voltage	550 V				
Start-up voltage	160 V				
MPPT voltage range	200 - 850 V				
Max. input current	20 A / 40 A		40 A / 40 A		42 A / 42 A
Max. short circuit current	30 A / 50 A		50 A / 50 A		50 A / 50 A
MPPT number / Max. input strings number	2 / 3				2 / 4
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40 - 60 V				
Max. charge / discharge current	180 A	220 A	250 A	290 A	320 A
Number of battery ports	2				
Max. charge / discharge current of each port	150 A				175 A
Communication	CAN / RS485				
Output AC (Grid side)					
Rated output power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power	8 kVA	10 kVA	12 kVA	15 kVA	18 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Input AC (Grid side)					
Max. input current	18.3 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.0 A	34.2 A / 32.5 A	41 A / 39.2 A
Input Generator					
Max. input power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. input current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated input frequency	50 Hz / 60 Hz				
Output AC (Back-up)					
Rated output power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	< 10 ms				
Rated output voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. continuous output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. continuous AC passthrough current	50 A				
THDv (@linear load)	< 3%				
Efficiency					
Max. efficiency	97.5%				
EU efficiency	96.4%				
BAT charged by PV / AC max. efficiency	95.0% / 94.4%				
BAT discharged to AC max. efficiency	94.5%				
Protection					
Anti-islanding protection	Yes				
Insulation resistance monitoring	Yes				
Output over current protection	Yes				
Short circuit protection	Yes				
DC reverse-polarity protection	Yes				
Surge protection	DC Type II / AC Type II (Optional)				
Protection Class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
Integrated AFCI 2.0	Optional				
Integrated DC switch	Yes				
General Data					
Max. power per phase	50% rated power				40% rated power
Dimensions (W × H × D)	430 × 660 × 305 mm				
Weight	42 kg				
Topology	Non-isolated				
Self-consumption (night)	< 30 W				
Operating ambient temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Noise emission (typical)	< 65 dB(A)				
Cooling concept	Intelligent fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	EN 50549-1/-10, VDE 4105&VDE 0124, NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, SriLanka, EN 50438L, Vietnam, MEA, PEA, CEI 0-21				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4				
Features					
DC connection	MC4 Quick connection plug (PV) & Screw terminal (Battery)				
AC connection	Screw terminal				
Display	7.0" LCD display & Bluetooth + APP				
Communication	CAN, RS485, Ethernet, Optional: S3-WiFi-ST, Cellular, LAN				