

LOW-VOLTAGE HYBRID INVERTER, THREE-PHASE

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KILOVANT



48V Low Voltage Battery

Built-in Transformer for Safety Isolation

Supports AC Coupling to Improve Solar System Efficiency

Direct Support for Diesel Generator Power Without External Converter

Max Charge and Discharge Current 240A

Support to Set Up 6 Time Periods of Charge/Discharge

Up to 10 Units Parallel During On/Off-grid Operation

Supports Multiple Battery Parallel

Datasheet

Model	6K	8K	10K	12K
PV STRING INPUT				
Max. DC Input Power (W)	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)			
Start-up Voltage (V)	160			
MPPT Voltage Range (V)	200-650			
Full Load MPPT Voltage Range (V)	350-650			
No. of MPP Trackers / Max. DC Input Current (A)	13+13	13+13	26+13	26+13
Max. DC Short Circuit Current (A)	17+17	17+17	34+17	34+17
No. of MPPT Trackers	2			
No. of Strings Per MPPT Tracker	2+1			
AC INPUT/OUTPUT DATA				
Rated AC Output and UPS Power (W)	6000	8000	10000	12000
Max. AC Output Power (W)	6600	8800	11000	13200
Peak Power (off grid)	2 times of rated power, 10 S			
AC Input/Output Rated Current (A)	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max. AC Input/Output Current (A)	10/9.6	13.4/12.8	16.7/15.9	20/19.1
Max. Three-phase Unbalanced Output Current (A)	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
Max. Output Short Circuit Current (A)	75			
Max. Continuous AC Passthrough (A)	45			
Power Factor	0.8 leading ~ 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 220/380Vac, 230/400Vac (Three Phase)			
Grid Type	Three Phase Four Wire			
Total Harmonic Distortion (THD)	<3%			
DC Current Injection	<0.5%In			
BATTERY				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	120	160	200	240
Max. Discharging Current (A)	120	160	200	240
Charging Curve	3 Stages/Equalization			
External Temperature Sensor	Yes			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
EFFICIENCY				
Max. Efficiency	97.6%			
Euro Efficiency	97.0%			
MPPT Efficiency	99.0%			
CERTIFICATIONS AND STANDARDS				
Grid Regulation	IEC61727/62116/EN50549-1			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4; IEC/EN 62109-1; IEC/EN 62109-2			
GENERAL DATA				
Operating Temperature Range (°C)	-40 ~ +60°C, >45°C Derating			
Cooling	Smart cooling			
Noise (dB)	<50 dB			
Communication with BMS	RS485/CAN			
Monitoring Mode	WiFi/APP			
Cabinet Size (mm)	446(W)×576(H)×255D (Excluding connectors and brackets)			
Weight (kg)	37.5			
Warranty / Protection Degree	5 Years (10 Years Optional) / IP65			

* If the ambient temperature is too high or too low, performance will be limited.
* Under specific test conditions.