



Low-Voltage Three-Phase Hybrid Inverter

For American Grid

Kayis Series



Models:

KE-6KD5L3UN	KE-8KD5L3UN
KE-7KD5L3UN	KE-10KD5L3UN
KE-7K5D5L3UN	KE-12KD5L3UN



Features

- The AC-DC matching ratio can reach 2 times
- MPPT tracking efficiency up to 99%
- Supports lead-acid / lithium battery connection
- Supports multiple communication interfaces
- Compatible with AFCI, GFCI and RSD functions
- Ingress Protection(IP)Rating:IP66

Datasheet

Model	KE-6KD5L3UN	KE-7KD5L3UN	KE-7K5D5L3UN	KE-8KD5L3UN	KE-10KD5L3UN	KE-12KD5L3UN
Battery Input Data						
Battery Type	Lead-acid or Lithium Iron Phosphate Battery					
Battery Voltage Range(V)	40-60					
Max.Charging Current(A)	135	150	160	190	210	240
Max.Discharging Current(A)	135	150	160	190	210	240
Charging Strategy for Li-ion Battery	BMS Adaptive					
Number of Battery Input	1					
PV String Input Data						
Max. PV Access Power (W)	12000	14000	15000	16000	20000	24000
Max. PV Input Power (W)	9600	11200	12000	12800	16000	19200
Max. PV Input Voltage (V)	800					
Start-up Voltage (V)	160					
MPPT Voltage Range (V)	200-650					
Rated PV Input Voltage (V)	550					
Max. Operating PV Input Current (A)	20+20				26+26	
Max. Input Short-Circuit Current (A)	30+30				40+40	
No. of MPPT Trackers/No. of Strings MPPT Tracker	2/1+1				2/2+2	
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	6000	7000	7500	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	6600	7700	8250	8800	11000	13200
Rated AC Input/Output Current (A)	9.1/8.7	10.6/10.1	11.4/10.8	12.2/11.6	15.2/14.5	18.2/17.4
Max.AC Input/Output Current (A)	10/9.6	11.7/11.1	12.5/11.9	13.4/12.8	16.7/16	20/19.2
Max.Continuous AC Passthrough (grid to load) (A)	63					
Peak Power (off-grid) (W)	2 Times Of Rated Power, 10s					
Power Factor Adjustment Range	0.8 leading ~ 0.8 lagging					
Rated Input/Output Voltage/Range (V)	120/208 0.85Un-1.1Un					
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65					
Grid Connection Form	3L+N+PE					
Total Current Harmonic Distortion THDi	<3% (Rated power)					
DC Injection Current	<0.5% In					
Efficiency						
Max. Efficiency	97.6%					
Euro Efficiency	97%					
MPPT Tracking Efficiency	99%					
Equipment Protection						
Integrated Protection	DC reverse polarity protection, DC component monitoring, DC switch, AC output overcurrent protection, AC output overvoltage protection, AC output short-circuit protection, insulation resistance detection, leakage current protection, thermal protection, anti-islanding protection, AFCI, GFCI, RSD compatible					
Surge Protection Level	DC Type II / AC Type III					
Interface						
Communication Interface	RS485/CAN					
Monitor Mode	Wi-Fi/Bluetooth/4G					
General						
Operating Temperature Range	-40~60°C (>45°C Derating)					
Humidity Range	0~100% RH (Non-condensing)					
Operating Altitude(m)	<2000					
Noise Level @ 1m	≤55dB @ 25°C (77°F)					
Ingress Protection(IP)Rating	IP66					
Inverter Topology	Non-Isolated					
Dimensions(HxWxD) (mm)	638×363×230					
Weight(kg)	58					
Type of Cooling	Natural cooling					
Warranty	5 Years/10 Years					
Certification						
Overview	UL1741, IEEE 1547, FCC Part 15B					