



IP66 Off - Grid Inverter

Kayis Series



Models:

- [KE-6KD5L1EF \(For European Grid\)](#)
- [KE-12KD5LSUF \(For American Grid\)](#)



Features

- Fully optimized insulation resistance detection technology
- MPPT tracking efficiency up to 99%
- Optional integration with Ktech iHEMS system
- Optional connectivity to Ktech RSD Cloud platform
- Optional mixed-loading capability
- Optional AFCI (Arc Fault Circuit Interrupter) protection
- Optional 10-year warranty coverage

Datasheet

Model	KE-6KD5L1EF (For European Grid)	KE-12KD5LSUF (For American Grid)
AC Input/Output		
Rated Input/Output Active Power(W)	6000	12000
Rated Input/Output Current(A)	27.3	50
Max.Bypass Current (Grid to Load)(A)	45	63
Peak Power(Off-Grid)	2 Times Of Rated Power, 10s	
Rated Voltage (V)	220/230	110/220
Frequency (Hz)	50/45-55, 60/55-65	
Connection Type	L+N+PE	2L+N+PE
Total Voltage Total Harmonic Distortion (THDv)	<3% (Rated power)	
DC Current Output	<0.5% x Rated current	
Transfer Time (Bypass and Inverter)(ms)	10	
Battery Parameters		
Battery Type	Lead-acid or Lithium Iron Phosphate Battery	
Max. Charge Current (Configurable) (A)	125	250
Max. Discharge Current (A)	125	250
Charging Voltage Range (V)	40-60	
Lithium-ion Battery Charging Strategy	BMS Adaptive	
Battery Input Ports	1	
PV Parameters		
Number of MPPT Trackers	2/1+1	2/2+2
Max.PV Open-Circuit Voltage(V)	550	
Start-up Voltage (V)	100	
Rated PV Voltage (V)	375	
MPPT Voltage Range (V)	125-425	
Max.PV Input Power (W)	9600	18000
Max.PV Input Current (A)	18+18	26+26
Max.PV Input Short-Circuit Current(A)	27+27	40+40
Efficiency		
Max. Efficiency	97.6%	
Euro Efficiency	96.5%	
MPPT Tracking Efficiency	99%	
Device Protection		
Integrated Protection	Over-temperature protection, overload protection, short-circuit protection, PV over-voltage protection, PV over-current protection, battery over-voltage protection, leakage protection, anti-islanding protection, ground fault detection, surge protection, GFCI	
Surge Protection Level	DC Type II / AC Type III	
General		
Ingress Protection (IP) Rating	IP66	
Operating Temperature Range	-40~60°C (>45°C Derating)	
Humidity Range	0~100% RH (Non-condensing)	
Noise Level @ 1m	<30dB @ 25°C (77°F)	
Type of Cooling	Natural cooling	
Communication Port	Built-in: RS485/CAN; Option 1: Wi-Fi+ Bluetooth, Option 2: 4G + Bluetooth	
Dimensions(HxWxD)(mm)	493x400x150	800x445x256
Weight(kg)	20	58
Operating Altitude(m)	<2000	
Warranty	5 Years/10 Years	
Certification		
Overview	CE-LVD EN IEC 62109-1/-2,RoHS	UL 1741, CSA, FCC Part 15B