



KE-16KF5LSUF

- Integrated circuit breakers (grid, load, generator, battery) and PV switch
- Single-phase full power output
- Integrated AFCI (arc-fault circuit interrupter)
- RSD-compatible (rapid-shutdown device)
- AC coupling
- Independent smart load interface
- Mixed load operation
- Seamlessly connect to iHEMS load management system

Split-phase Off-grid Inverter Technical Parameters

Model	KE-16KF5LSUF
Inverter Output	
Rated Output Power (W)	16000
Rated Output Voltage (V)	120/240
Rated Frequency (Hz)	50/60
Overload Capacity	110% 5min; 150% 5s
Transfer Time	10ms (Typical value); Max 15ms for single unit, max 30ms for parallel operation
Max Parallel Units	6
Total Voltage Total Harmonic Distortion (THDv)	<3% (Rated power)
DC Current Output	<0.5% x Rated current
Output Port Configuration	Primary Load Output Ports + Smart Load / AC Coupling Ports
Battery Parameters	
Battery Type	Lead-acid or Lithium Iron Phosphate Battery
Rated Battery Voltage (V)	48
Voltage Range (V)	40~60
Li-ion Battery Charging Strategy	BMS Adaptive
Max Charging Current (A)	290
Max Discharging Current (A)	290
PV Input	
Number of MPPT Trackers	3/2+1+1
Max Input Power (W)	24000
Max Input Current (A)	28+20+20
Max Input Short-Circuit Current (A)	42+30+30
Max Open-Circuit Voltage (V)	550
MPPT Rated Voltage (V)	375
MPPT Start-Up Voltage (V)	100
MPPT Operating Voltage Range (V)	125 ~ 475
Utility / Generator Input	
Input Interface	2
Input Voltage Range (V)	90~280
Input Frequency Range (Hz)	50/45-55, 60/55-65
Bypass Overload Current (A)	160
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 overvoltage protection, PV overcurrent protection, battery overvoltage protection, leakage protection, ground fault detection protection, surge protection, GFCI, AFCI, RSD compatible
Surge Protection Level	DC Type II / AC Type III
General	
Ingress Protection (IP) Rating	IP20
Operating Temperature Range	-10~55°C (>45°C Derating)
Noise Level @ 1m	≤45 @ 25°C (77°F)
Type of Cooling	Intelligent Air Cooling
Dimensions(HxWxD) (mm)	957×597×152
Weight (kg)	51
Operating Altitude(m)	< 2000
Warranty	1 Year
Communication	
Communication Port	Built-in: RS485/CAN ; Option 1: Wi-Fi + Bluetooth;Option 2: 4G + Bluetooth
Certification	
Overview	UL 1741, CSA, FCC Part 15B

