



KE-12KF5LSUF/16KF5LSUF

- Integrated circuit breakers (for grid, load, generator, and battery applications) and photovoltaic switchgear
- Single-phase full-power output capability
- Integrated Arc Fault Circuit Interruption (AFCI)
- Rapid Shutdown (RSD) compatibility
- AC coupling functionality
- Dedicated Smart Load port
- Mixed loading capability
- Seamless integration with the iHEMS load management system



Split-Phase Off-Grid Inverter Technical Data

Model	KE-12KF5LSUF		KE-16KF5LSUF	
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	12000		16000	
Rated AC Input/Output Current (A)	50		66.7	
Max. Continuous AC Passthrough (grid to load) (A)	200		200	
Peak Power (off-grid) (W)	2 Times Of Rated Power, 10s			
Power Factor Adjustment Range	0.9-1			
Rated Input/Output Voltage/Range (V)	220/240, 0.88Un < U < 1.1Un			
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65			
Grid Connection Form	2L+N+PE			
Total Current Harmonic Distortion THDi	<3% (Rated power)			
DC Current Output	<0.5% x Rated current			
Conversion Time (Bypass and Inverter)(ms)	10			
Battery Input Data				
Battery Type	Lead-acid / Lithium Iron Phosphate Battery			
Max.Charging Current(A)	250		300	
Max.Discharging Current(A)	250		300	
Battery Voltage Range(V)	40-60			
Charging Strategy for Li-ion Battery	BMS adaptivity			
Number of Battery Input	1			
PV String Input Data				
No. of Circuits	2/2+2		3/2+1+1	
Max. PV Open-circuit Voltage (V)	550			
Start-up Voltage (V)	100			
Rated PV Voltage (V)	370			
MPPT Voltage Range (V)	125-425			
Max. PV Input Power (W)	18000		24000	
Max. Operating PV Input Current (A)	28+28		28+20+20	
Max. Input Short-Circuit Current (A)	42+42		42+30+30	
Efficiency				
Max. Efficiency	97.6%			
Euro Efficiency	96.5%			
MPPT Efficiency	>99%			
Equipment Protection				
Integrated	DC polarity reverse connection protection, AC output overload protection, thermal protection, AC output overvoltage protection, AC output short circuit protection, DC Component Monitoring, Overvoltage Load Drop Protection, ground current monitoring, Power Network Monitoring, ground fault monitoring, DC input switch, DC terminal impedance monitoring, residual current monitoring (RCD), surge protection			
General Data				
Ingress Protection (IP) Rating	IP20			
Operating Temperature Range(°C)	-40~+ 60, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Noise Level @ 1m	<30dB @ 25°C (77°F)			
Type of Cooling	Intelligent Air Cooling			
Communication Port	RS485/CAN/Wi-Fi /Bluetooth/4G(Optional)			
Dimensions (HxWxD)(mm)	865 x 510 x 157			
Weight(kg)	39			
Permissible Altitude(m)	2000			
Warranty	2 Years			
Certification				
Overview	UL 1741 3nd Edition (September 28, 2021),CSA-C22.2 No.107.1-16, FCC SDOC Part 15B			

