

# Off-grid Inverter 3-6kW

# Ei.F003KL-006KL

Single-phase Off-grid Inverter (Low voltage)



\* Product appearance may vary



Flexible Design



Safe & Stable



User-friendly

- Clear screen and intelligent APP for friendly and easy operation
- Up to **2 MPPTs** and **20A** input per one, compatible with the latest high-power PV modules
- **IP65** protection rating, longer warranty and better performance in harsh environmental conditions
- **200%** DC/AC ratio for maximum solar power utilization
- Wide input voltage range for extended daily operating hours
- **200%** overload for **10** seconds, ensuring reliable startup of inductive loads

- Up to **140A** (dis)charging current, enabling faster charging and strong discharge capability
- Switching time **<10 ms**, providing seamless transition between different modes
- Integrated **Type II SPD** on both DC and AC sides for comprehensive surge protection
- Up to **4 units** parallel operation in off-grid mode, enabling scalable and reliable energy systems

Models	Ei.F003KL -A1.11-P1NV-L	Ei.F3.6KL -A1.22-P1NV-L	Ei.F004KL -A1.22-P1NV-L	Ei.F005KL -A1.22-P1NV-L	Ei.F006KL -A1.22-P1NV-L
<b>PV input data</b>					
Recommend max. PV capacity (W)	6000	7200	8000	10000	12000
Max. PV input power (W)	4800	5760	6400	8000	9600
Max. PV input voltage (V)			500		
Rated voltage (V)			370		
Start voltage (V)			100		
MPPT voltage range (V)			100-450		
Max. PV input current (A)	20	20/20	20/20	20/20	20/20
Max. short-circuit current per MPPT (A)	30	30/30	30/30	30/30	30/30
MPPT number	1	2	2	2	2
NO. of PV strings per MPPT	1	1/1	1/1	1/1	1/1
<b>Battery input data</b>					
Battery type			Li-ion/Lead-acid		
Battery voltage range (V)			40~60		
Max. charging current (A)	70	90	100	120	140
Max. discharging current (A)	70	90	100	120	140
<b>AC input Data(grid side)</b>					
Max. input power (W)	4500	5400	6000	7500	9000
Max. input current (A)	20.5	24.5	27.3	34.1	40.9
Operation phase			L+N+PE		
Rated voltage (V)			220/230		
Rated frequency (Hz)			50/60		
THDi			< 3%		
Power factor			1(0.8leading~0.8lagging)		
<b>AC output (backup)</b>					
Rated output power (W)	3000	3600	4000	5000	6000
Peak power (VA,s)	6000, 10	7200, 10	8000, 10	10000, 10	12000, 10
Rated output current (A)	13.7/13.1	16.4/15.7	18.2/17.4	22.8/21.7	27.3/26.1
Rated output voltage (V)			220/230		
Rated frequency (Hz)			50/60		
Switch time (ms)			<10		
<b>Generator data</b>					
Rated input power (W)	3000	3600	4000	5000	6000
Max. apparent input power (VA)	3300	3960	4400	5500	6600
Max. input current (A)	15.0	18.0	20.0	25.0	30.0
Rated input voltage (V)			220/230		
Rated frequency (Hz)			50/60		
<b>Efficiency</b>					
Max. efficiency			97.60%		
EU efficiency			97.00%		
<b>Protection</b>					
DC switch			Yes		
DC reverse-polarity connection protection			Yes		
Thermal protection			Yes		
AC overvoltage/current protection			Yes		
AC short circuit protection			Yes		
Ground fault circuit interrupter			Yes		
Power network monitoring			Yes		
Island protection			Yes		
Ground fault monitoring			Yes		
Insulation resistance monitoring			Yes		
Residual current detection			Yes		
Arc fault circuit interrupter			Optional		
Surge protection			AC Typell/DC Typell		
<b>General</b>					
Dimensions (W*H*D mm)			389*460*155		
Weight (kg)			16		
Noise (dB)			<45		
Operating temperature (°C)			-25~60 (>45°C derating)		
Type of cooling			Smart air cooling		
Topology			Transformless		
Communication			RS485/CAN, Bluetooth, WIFI(optional)		
Permissible altitude (m)			3000 (>2000m derating)		
Permissible ambient humidity			0~100%		
Ingress protection (IP) grade			IP65		
Warranty			5 years		
Display			LCD+LED		
Safety EMC/Standard			IEC61727,IEC62116(Additional certifications in progress. See website for updates.)		
Safety EMC/Standard			IEC EN 61000-6-3; IEC62920; IEC62109-1/2		