



The **e**nergy of the future

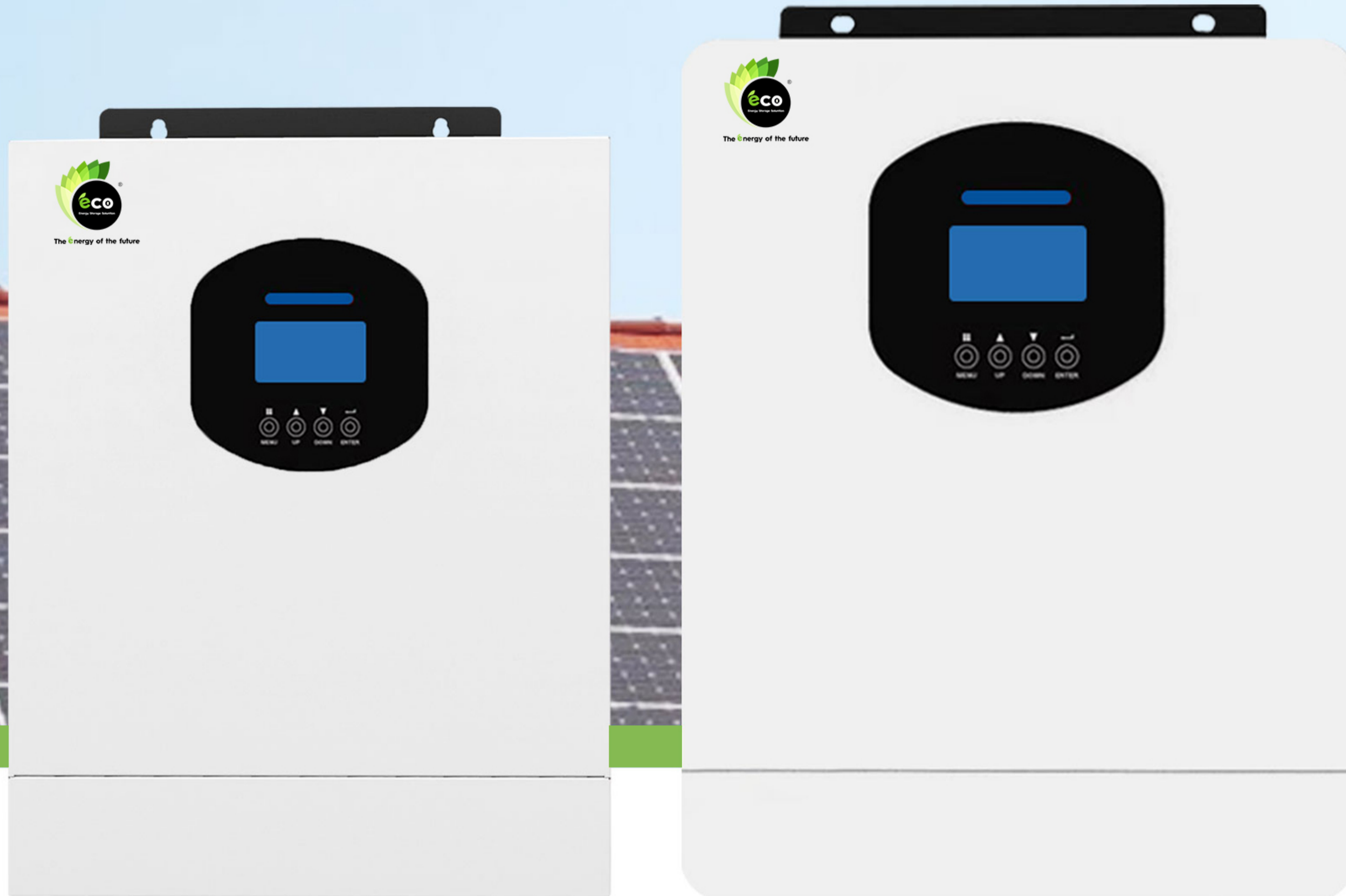


Hybrid Inverters

3kw to 20kw

Cost Effective HV PV MPPT

Cost-Effective HV PV MPPT



Integrated inverter & MPPT



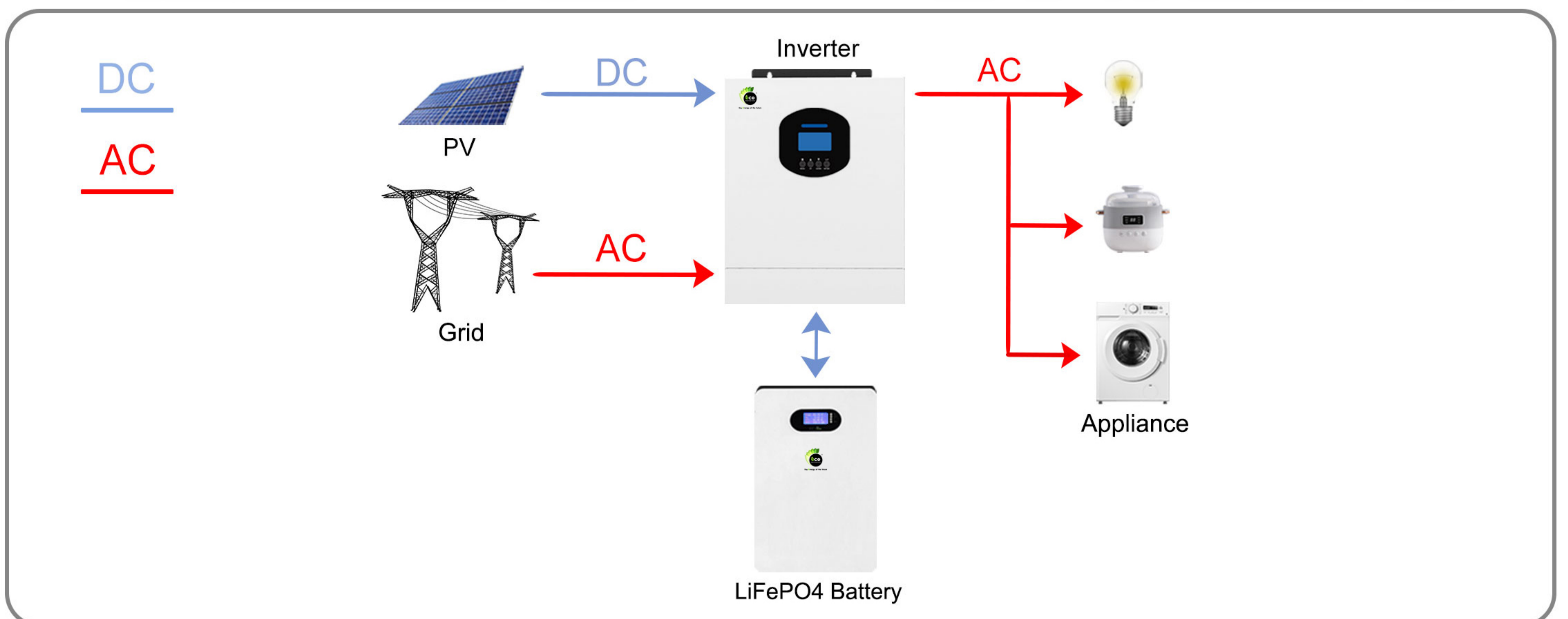
Support AC charge



Support PV activation



Support battery mode



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	3KW	6KW	10KW
Module	ECO-3KF1-L1	ECO-6KF1-L1	ECO-10KF1-L1
Battery			
Battery Voltage	24V	48V	48V
Battery Voltage Range	20~30V	40~58V	40~58VDC
Battery Type	L+N+PE		
Inverter			
Rated Power	3000VA	6000VA	10000VA
Surge Power	6000VA	12000VA	20000VA
Waveform	Pure sine wave		
AC			
AC Voltage Regulation (Battery Mode)	208/220/230/240Vac		
Frequency	50Hz / 60Hz		
Efficiency(Peak)	93.50%		
Transfer Time	10ms typical, 20ms Max		
Max PV Power	3000W	5500W	6000W*2
PV Open Circuit Voltage	450VDC	500VDC	500VDC
MPPT Range @ Operating Voltage	30-400Vdc	90-450Vdc	90~450Vdc (2 channels)
Max Solar Charge Current	80A	120A	120A
PV			
MPPT channels	1	1	2
AC Input Voltage	230VAC		
AC Charge Current	60A	100A	160A
Selectable Voltage Range	170~280VAC (For Personal Computers) 90~280VAC (For Home Appliance)		
Frequency	50Hz / 60Hz (Auto sensing)		
Physical			
Dimension(D*W*H/mm)	270*95*350	350*115*425	400*170*620
Net Weight (kg)	6kg (about)	11kg (about)	16kg (about)
Communication Interface	USB/RS485		
Protection Degree	IP21		
Installation method	Wall Monted		
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature	-10°C ~ 50°C		
Storage Temperature	-15°C ~ 60°C		

*THE PARAMETERS ARE FOR REFERENCE ONLY, THE ACTUAL PRODUCT SHALL PREVAIL
SUPPORT CUSTOMIZATION, AND ON-DEMAND CUSTOMIZATION



Max 6 Sets in Parallele Support AC and PV Charge



Fast charge mode



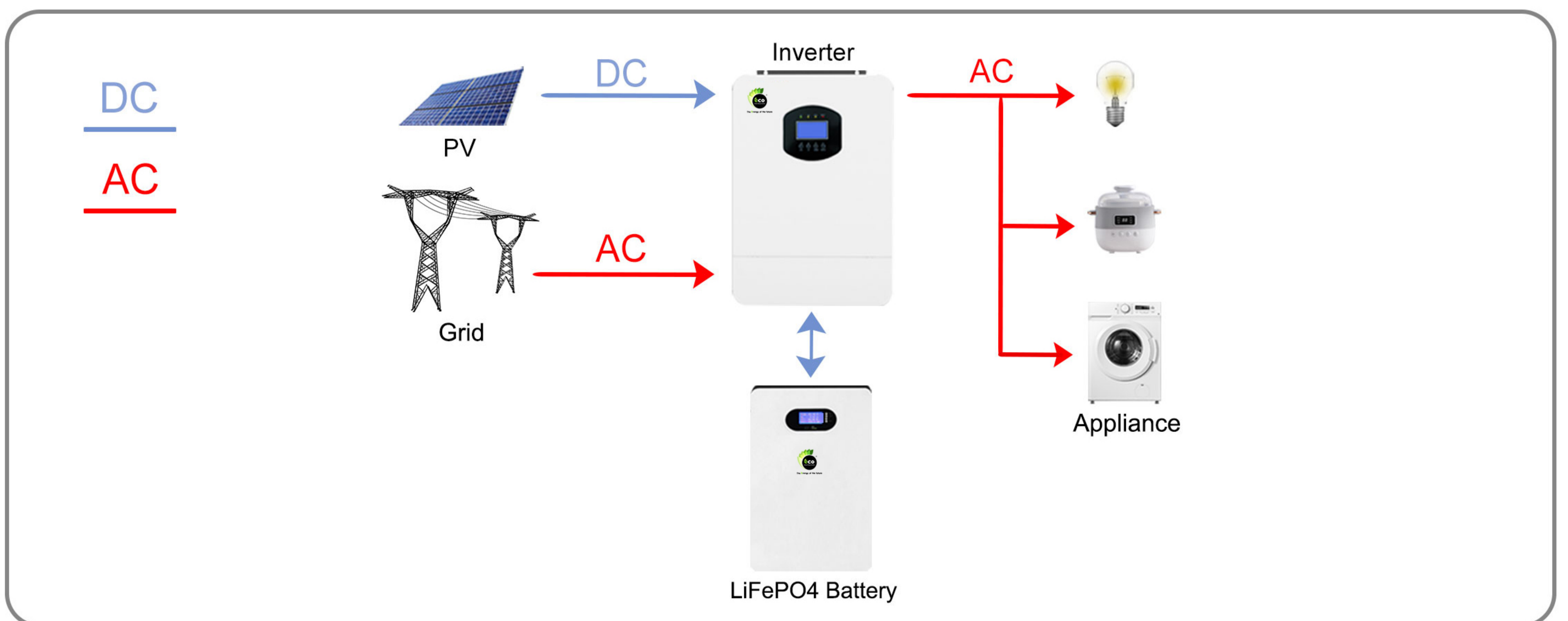
Integrated UPS



HV PV MPPT



Support WiFi



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	3.6KW	5KW	11KW
Module	ECO-3.6KF1-A1	ECO-5KF1-A1	ECO-11KF1-A1
AC output			
Typical power output	3600W	5000W	11000W
Typical voltage output	230VAC+/-5%		
Output frequency	50/60Hz		
Highest efficiency	94%		
Output wave	Pure sine wave		
Conversion time	Typical 10mS, maximum 20mS		
Battery			
Battery typical voltage	48Vdc		
Battery voltage range	40~58Vdc		
Battery type	Lithium battery/ Lead acid battery		
PV			
Max. PV power	4500W	5500W	5500W*2
Controller voltage range	30~400Vdc	120~430Vdc	120~430Vdc
PV max. output voltage	500Vdc		
MPPT channels	1		
PV max. charging current	60A	100A	100A
AC input			
AC input voltage	230Vac		
AC input voltage range	185~264Vac		
AC input frequency	50/60Hz adaptive		
Others			
Max. number of parallels	/	6	3
Waterproof	IP21		
Working temperature range	-10~50°C		
Storage temperature range	-10~60°C		
Humidity range	5% to 95% Relative Humidity (Non-condensing)		
Size/mm	300*110*360	335*125*480	505*170*535
Weight/kg	8	12	22

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IP65 Hybrid Inverter Waterproof Max 6 Sets in Parallel



2 channels
HV PV MPPT controller



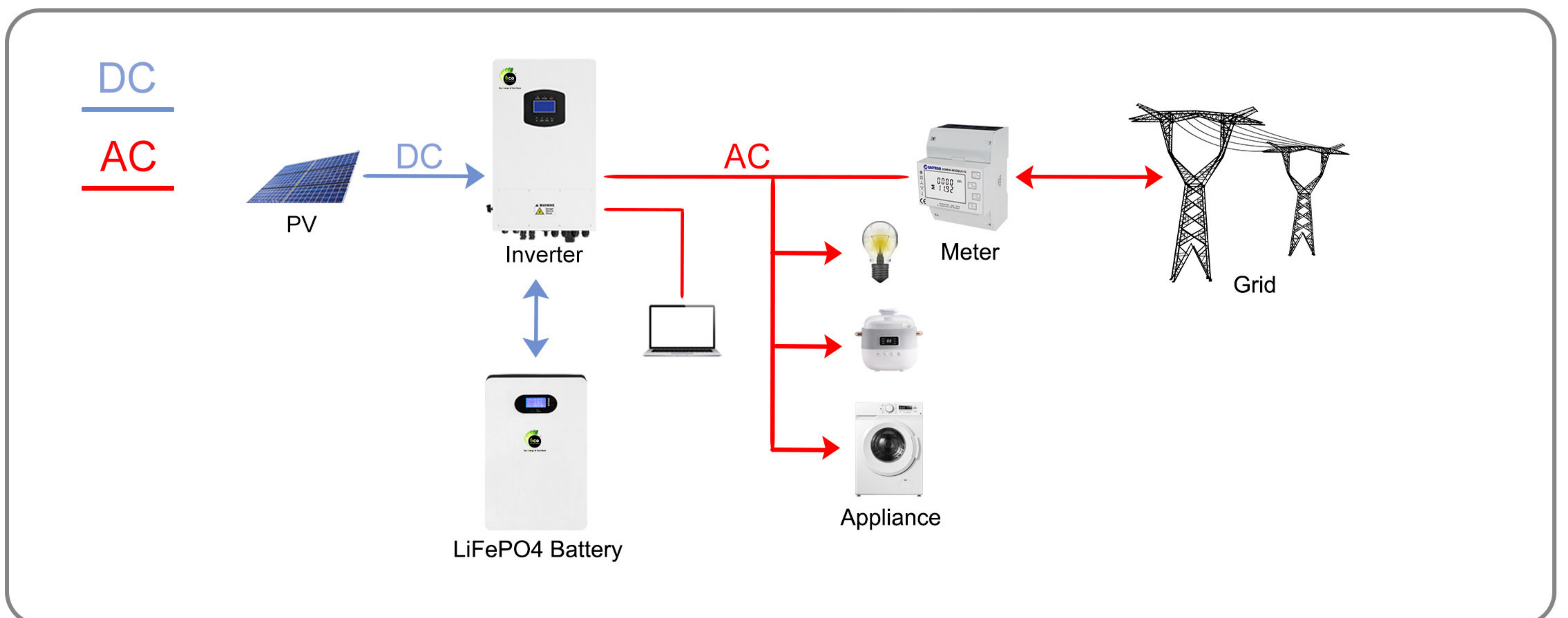
Fast charge
current 100A



Support WiFi



On-grid/ Off-grid
and UPS



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	3.6KW	4.6KW	5KW
Module	ECO-3.6KH1-A1	ECO-4.6KH1-A1	ECO-5KH1-A1
Battery			
Battery Voltage	48VDC		
Battery Voltage Range	41.5~58.5VDC		
Battery Type	Li-ion Battery / LiFePO4 Battery		
Communication Interface	RS485/CAN		
Output/ Input (AC)			
Rated Power	3960VA	5000VA	5500VA
Surge Power	6000VA	8500VA	11000VA
Waveform	Pure sine wave		
Rated Grid Voltage	230VAC		
Frequency	50Hz / 60Hz		
PV Input (DC)			
Max PV Power	5200W	6600W	7000W
Max PV Voltage	500VDC		
Starting Voltage	150V		
MPPT Range	120~430VDC		
MPPT Quantity	2		
Max PV Current	110A	110A	120A
Off-grid Output			
Max Output Power	3600W	4600W	5000W
AC Input Voltage	230VAC		
Frequency	50Hz / 60Hz		
UPS Switching Time	< 20mS		
Overload Capacity	110% 30S/120% 10S/150% 80mS		
Efficiency			
Max Efficiency	98%		
Max Discharge Efficiency	95%		
MPPT Efficiency	98%		
Physical			
Dimension(D*W*H/mm)	350*230*580		
Net Weight (kg)	23.5kg		
Communication Interface	USB/RS485/WiFi		
Protection Degree	IP65		
Installation method	Wall Mounted		
Environment			
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature	-10°C ~ 50°C		
Storage Temperature	-15°C ~ 60°C		

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5KW~12KW 3-Phase Hybrid Inverter IP65 Waterproof



2 Channels of high-voltage MPPT



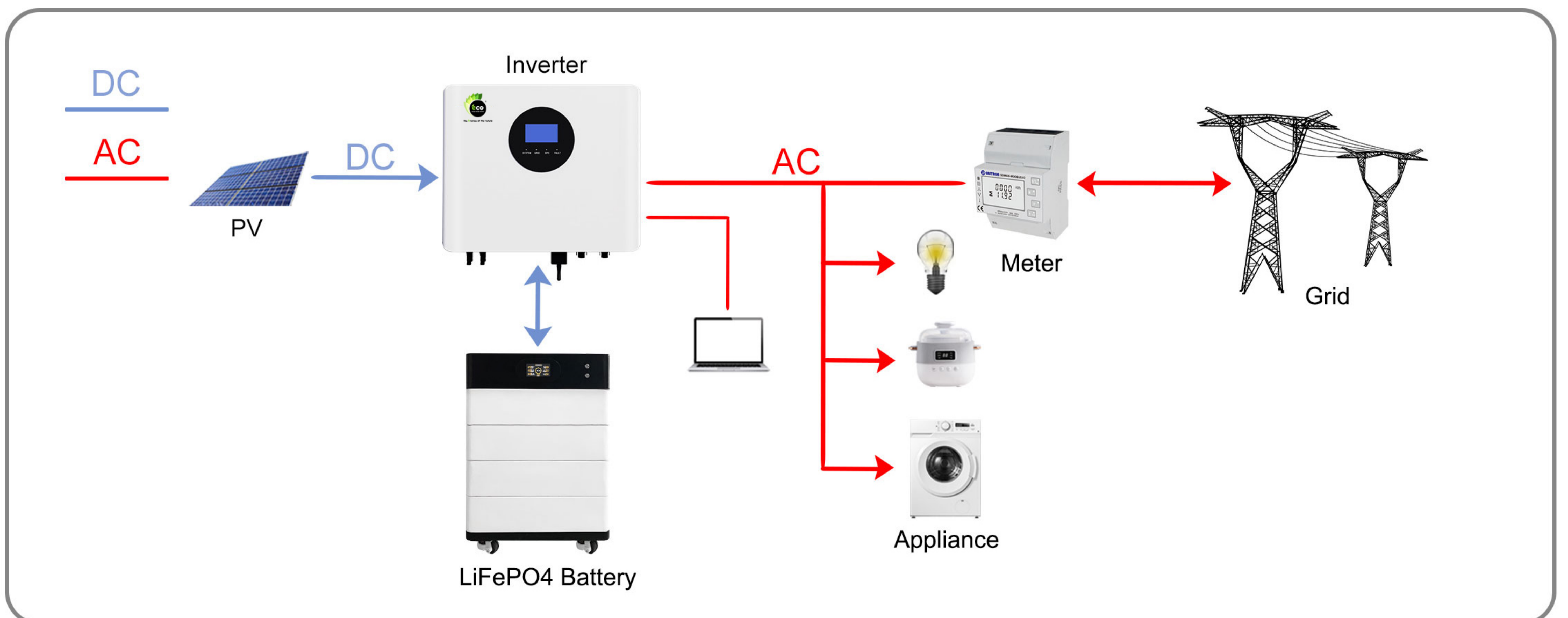
High voltage LiFePO4 Battery



3 -phase AC output



Safe and reliable



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	8KW	10KW	12KW
Module	ECO-8KH3-A1	ECO-10KH3-A1	ECO-12KH3-A1
Output(AC)			
Nominal power	8000VA	10000VA	12000VA
Max. power	8800VA	11000VA	13000VA
Max. output current	15A	17A	20A
Norminal output voltage	400Vac/ 380Vac		
Norminal frequency	50/ 60Hz		
Grid type	L1/ L2/ L3/ N/ PE		
PV Input			
Max. DC power	12000W	15000W	15000W
MPPT voltage range	200~850Vdc		
Max. DC voltage	1000Vdc		
Max input current/ per string	13A*2		
MPPT channels	2		
Battery Input			
Battery Type	LiFePO4 Battery		
Battery voltage range	140~700Vdc		
Max. charge/ discharge current	25A/ 25A		
AC Output (Back-up)			
Max. AC power	8000VA	10000VA	12000VA
Norminal output voltage	400Vac/ 380Vac		
Norminal frequency	50/ 60Hz		
Efficiency			
Max. conversion efficiency	98.2%		
European efficiency	97.5%		
Max battery to AC efficiency	97.4%		
MPPT efficiency	99.9%		
Safety and Protection			
DC reverse-polarity protection	Yes		
DC breaker	Yes		
DC/ AC SPD	Yes		
General Parameters			
Dimension (W*H*D)/ mm	548*444*184mm		
Weight/ (kg)	27kg		
Operating temperature range	-20~60°C		
Degree of protection	IP65		
Cooling concept	Natural convection		
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Communication	WiFi		
BMS communication	CAN/RS485		
Meter communication	RS485		

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12KW~20KW High Voltage 3-Phase Hybrid Inverter IP65



IP65 waterproof



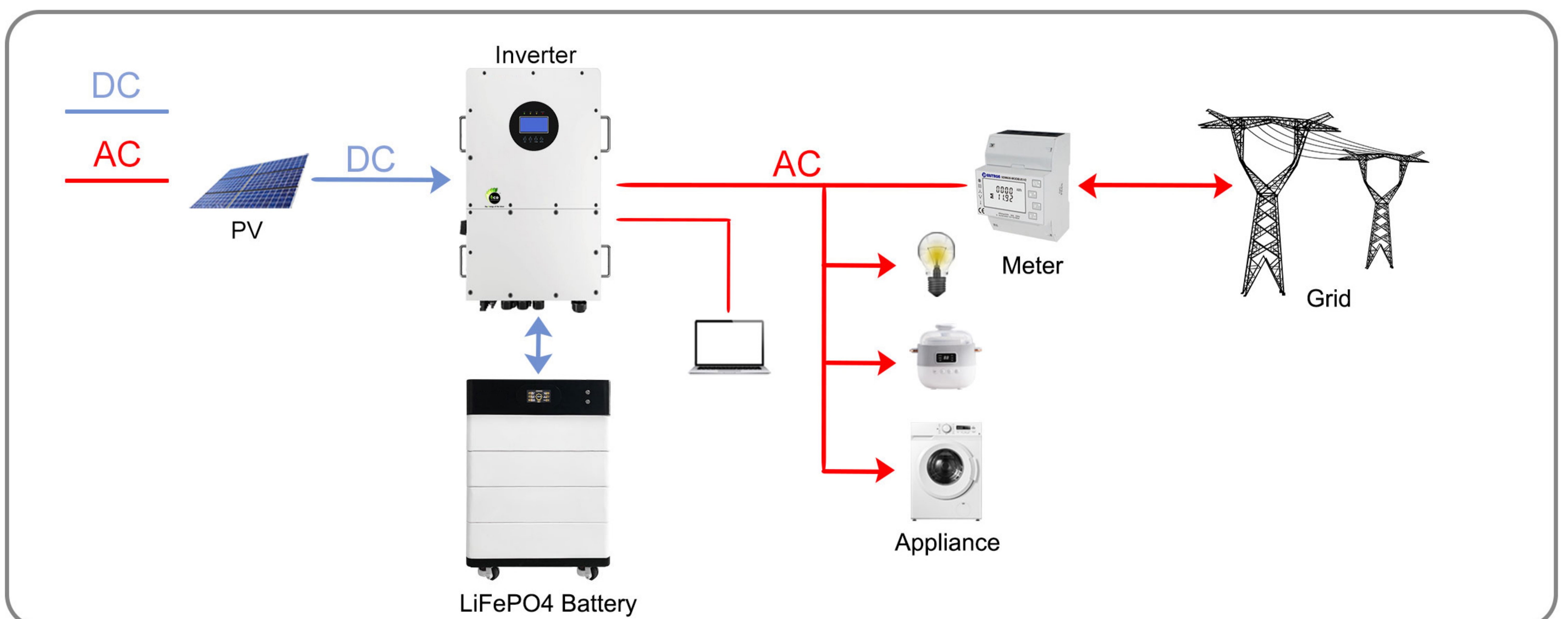
48V LiFePO4 Battery



On/Off-grid and UPS



Max Support 6 sets parallel
(Hybrid)



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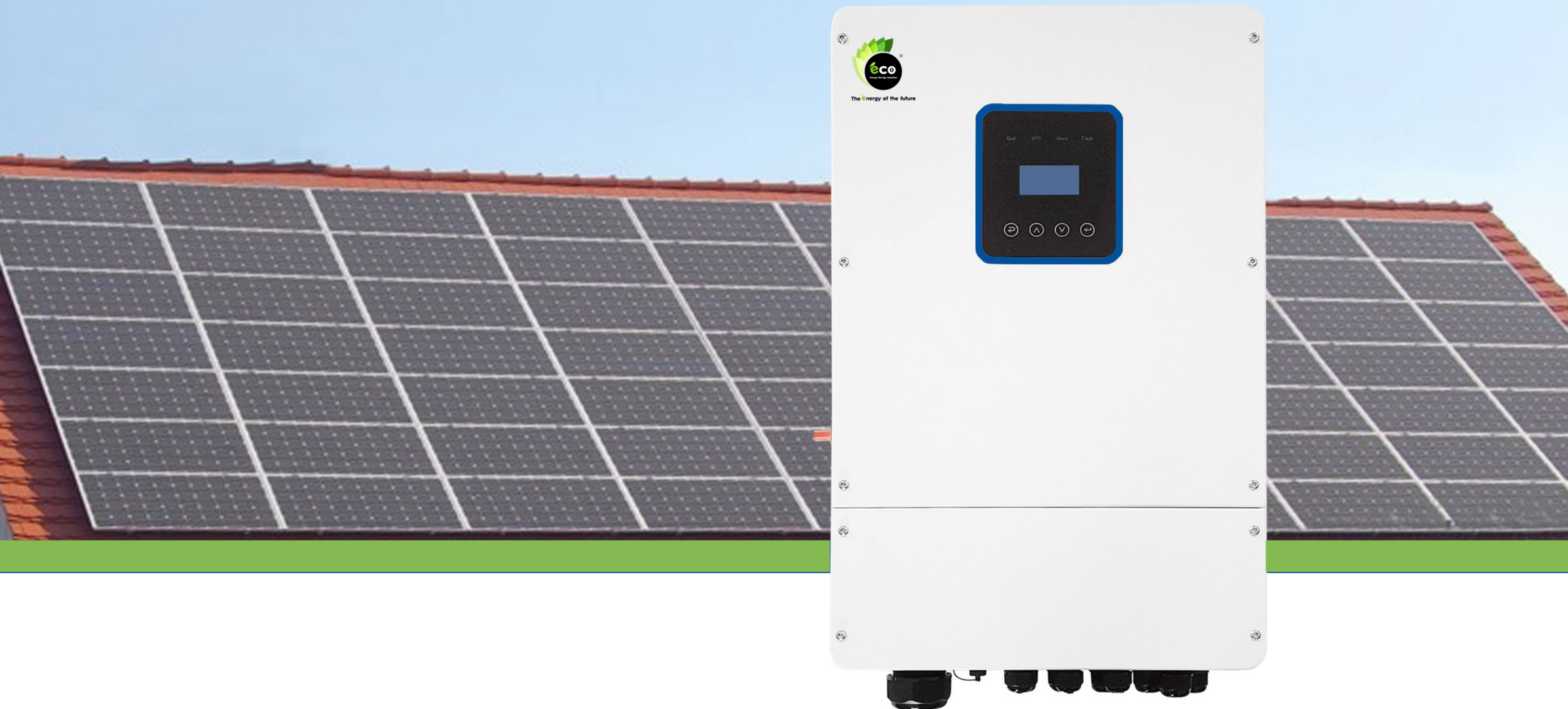
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	12KW	15KW	20KW
Module	ECO-12KH3-HB1	ECO-15KH3-HB1	ECO-20KH3-HB1
PV			
Max. PV power	15.6KW	19.5KW	26KW
Max. PV voltage	1000Vdc		
MPPT voltage range	325~850Vdc		
Max. PV current	26+26		
MPPT channels	2+2		
AC Output			
Rated power	12KW	15KW	20KW
Max. power	14.4KW	16.5KW	22KW
AC voltage	400Vac/230Vac		
Max AC current	48A	60A	80A
Norminal frequency	50/60Hz		
Battery			
Battery type	Li-ion battery		
Battery voltage range	160~700Vdc		
Max. charge/ discharge current	37A/ 37A		
BMS communication	RS485/CAN		
General parameters			
Max. efficiency	97.5%		
MPPT efficiency	99.0%		
Work temparature	-30~55°C		
Cooling method	Smart Cooling		
Communication	WiFi		
IP grade	IP65		
Size	460*250*680mm	460*250*685mm	460*250*685mm
Weight	30Kg		

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4 Channels of High-Voltage MPPT IP65 Waterproof



Split-phase
120Vac/ 240Vac



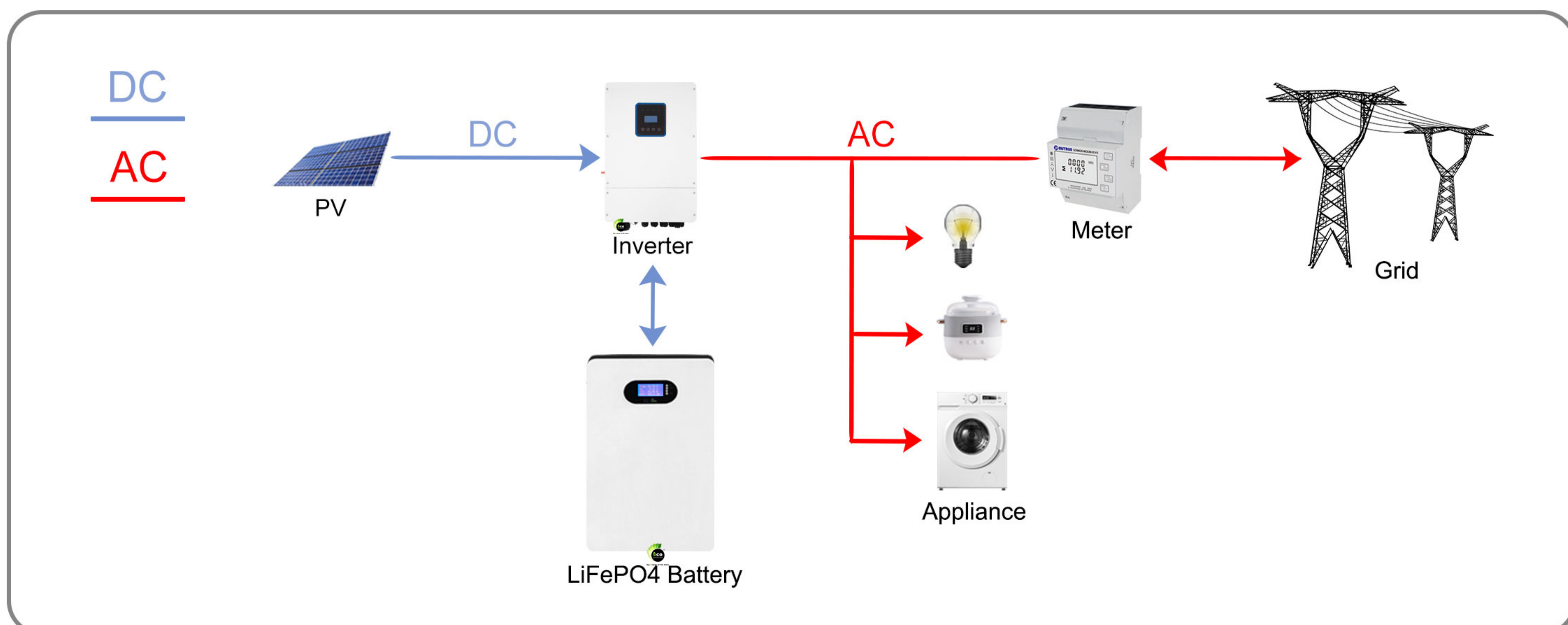
On-grid, off-grid
and UPS



Fast charge current 200A



Support RS485 and WiFi



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	5KW	8KW	10KW
Module	5KH1NA-ECO	8KH1NA-ECO	10KH1NA-ECO
AC output (grid)			
Typical output frequency	5000W	8000W	10000W
Peak output power	10000VA	15000VA	18000VA
Rated output voltage	230VAC+/-5%		
Output frequency	50/60Hz		
Highest efficiency	94%		
Output wave	Pure sine wave		
Off-grid output			
Max. power	5000W	8000W	
Rated output voltage	120VAC/240VAC(Split phase)		
Output frequency	50/60Hz		
Conversion time	<20mS		
Battery			
Battery typical voltage	48VDC		
Battery voltage range	40~58VDC		
Battery type	Lithium battery/ Lead acid battery		
BMS communication interface	RS485/CAN		
PV			
Max. PV power	7500W	12000W	
MPPT voltage range	120~430VDC		
PV max. input voltage	500VDC		
MPPT channels	4		
PV max. charging current	15A	20A	
AC input			
AC input voltage	230VAC		
AC input voltage range	185~264VAC		
AC input frequency	50/60HzAdaptive		
Others			
Waterproof	IP65		
Working temperature range	0~50°C		
Storage temperature range	15-60°C		
Humidity range	20%~95% No frost		
Size	430*220*710mm		
Weight	41kg		

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