



Three-Phase Hybrid Inverter

HUA-8~15K3P-BL

「8/10/12/15kW」

Features



Oversizing Ratio

Higher PV / AC ratio up to 1.6, allowing greater energy harvest



Unbalanced Output

Support 150% three-phase unbalanced output to improve flexibility of power distribution



Smart Load Management

Dual AC outputs to power loads on demand priority



Overload Capacity

Peak power able to reach 2 times the rated power for 10s in off-grid mode



Generator Input

Equipped with GEN port to connect with diesel generator



Efficient Battery Charge / Discharge

Max. battery charge/discharge current of up to 290A



Parallel Connection

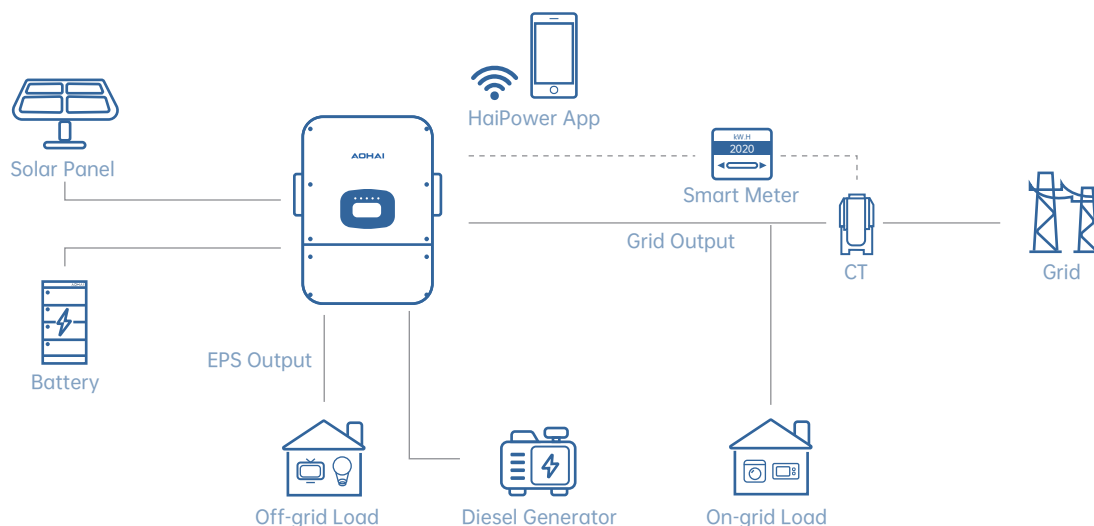
Support parallel connection up to 9 units



Touch Screen

4.3" 800 x 480 interactive display without physical keys

Energy Storage Solution



Specifications

Model	HUA-8K3P-BL	HUA-10K3P-BL	HUA-12K3P-BL	HUA-15K3P-BL
Solar Input Data				
Recommended Max. PV Array Size (Wp)	16000	20000	24000	30000
Max. PV Input Power (W)	12800	16000	19200	24000
Max. Input Voltage (V)			800	
Start-up Voltage (V)			160	
Nominal Input Voltage(V)			550	
MPPT Operating Voltage Range (V)			160~650	
MPPT Voltage Range (full load)	350~650	350~650	350~650	400~650
Max. Input Current per MPPT (A)			27+20	
Max. Short Circuit Current per MPPT (A)			40+30	
Number of MPPT			2	
Number of Strings per MPPT			2+1	
Max. Inverter Backfeed Current to The Array			0	
Battery Data				
Battery Type	Lead-acid or Lithium-ion			
Nominal Battery Voltage(V)	48			
Battery Voltage Range (V)	40~60			
Max. Charge / Discharge Current (A)	180	220	250	290
Max. Charge / Discharge Power (W)	8000 / 8000	10000 / 10000	12000 / 12000	15000 / 15000
Battery Communication	Self-adaption to BMS			
Number of Battery Input	2 (in parallel)			
AC Input / Output Data (Grid, Load & Generator)				
Nominal AC Input / Output Active Power (W)	8000	10000	12000	15000
Max. AC Input / Output Apparent Power (VA)	8800	11000	13200	16500
Peak Apparent Power (off-grid) (VA)	2 times of rated power, 10s			
Nominal AC Input / Output Current (A)	12.2 / 11.6 / 11.2	15.2 / 14.5 / 13.9	18.2 / 17.4 / 16.7	22.8 / 21.8 / 20.9
Max. AC Input / Output Current (A)	13.4	16.7	20	25
Max. Three-phase Unbalanced Output Current (A)	18.2	22.7	27.3	34.1
Max. Continuous AC Passthrough (grid to load) (A)	50	50	50	50
Max. Output Fault Current (A)	26.8	33.4	40	50
Max. Output Over Current Protection (A)	73.5			
Nominal Input / Output Voltage (V)	220 / 380, 230 / 400, 240 / 415			
Input / Output Voltage Range (V)	0.85Un-1.1Un			
Grid Connection Form	3L+N+PE			
Nominal Grid Frequency / Range (Hz)	50 / 45-55, 60 / 55-65			
Power Factor	~1 (0.8 leading to 0.8 lagging)			
THDi (nominal power)	< 3%			
DC Injection Current	< 0.5%In			
Switch time (ms)	4			
Efficiency				
Max. Efficiency	97.60%			
European Efficiency	97.0%			
MPPT Efficiency	>99.9%			
Protection				
PV Reverse Polarity Protection	yes			
Anti-Islanding Protection	yes			
Output Short Protection	yes			
Ground Fault monitoring	yes			
Insulation Resistance Monitoring	yes			
Over-current Protection	yes			
Over-temperature Protection	yes			
AFCI Protection	Optional			
DC Switch	yes			
Residual Current Monitoring	yes			
Grid Monitoring	yes			
AC / DC Surge Protection	TYPE II (DC), TYPE II (AC)			
General Data				
Dimension (W*H*D) (mm)	450 x 660 x 240 (Excluding connectors and brackets)			
Weight (kg)	39			
Relative Humidity	0~100%			
Operating Temperature Range (°C)	-40 to +60, >45 Derating			
Storage Temperature (°C)	-45 to +85			
Noise Emission (dB)	<55			
Altitude (m)	3000			
Cooling Method	Intelling Air Cooling			
Ingress Protection	IP66			
Over Voltage Category	OVC II (DC), OVC III (AC)			
Protective Class	I			
Standby / Internal Consumption (W)	<25 (night)			
Topology	Non-Isolated			
Communication Interface	RS485 / CAN / Bluetooth / WIFI, LAN / 4G / GPRS (optional)			
Power Grid Side Energy Detection Method	3 CTs, Meter (optional)			
Display	LCD & APP			
PV Connector	MC4 compatible connector			
Battery Connector	Connector			
AC Connector	Connector			