Three-Phase Hybrid Inverter

MHSI-15K-06LP3

Features

PV Oversizing
Support up to 200% oversizing ratio

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

High-Power Density
A compact size for flexible installation and reduced transportation cost

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

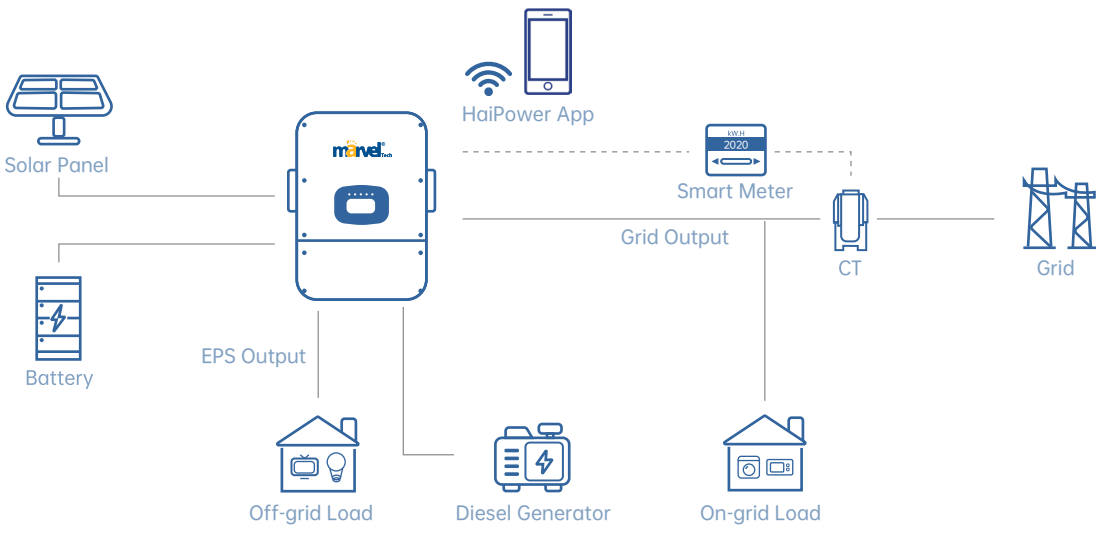
Touch Screen
4.3'' 800 x 480 interactive display without physical keys

Flexible Connection
- GEN port for generator input
- Dual AC outputs for smart load management
- AC coupling function

Parallel Connection
Support parallel connection up to 9 units

Efficient Battery Charge / Discharge
Max. battery charge/discharge current of up to 290A

Energy Storage Solution



Specifications

Model	MHSI-15K-06LP3
Solar Input Data	
Recommended Max. PV Array Size (Wp)	30000
Max. PV Input Power (W)	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)	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)	290
Max. Charge / Discharge Power (W)	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)	15000
Max. AC Input / Output Apparent Power (VA)	16500
Peak Apparent Power (off-grid) (VA)	2 times of rated power, 10s
Nominal AC Input / Output Current (A)	22.8 / 21.8 / 20.9
Max. AC Input / Output Current (A)	25
Max. Three-phase Unbalanced Output Current (A)	34.1
Max. Continuous AC Passthrough (grid to load) (A)	50
Max. Output Fault Current (A)	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 (℃)	-40 to +60, >45 Derating
Storage Temperature (℃)	-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

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