



Energy Storage Inverter

JBL-HYB-50K-3PH



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Supports up to 10-unit parallel operation in both on-grid and off-grid modes, featuring scalable capacity.



Equipped with GEN port, compatible with diesel generators, smart loads, and AC coupling.



IP66 rated enclosure, designed for both indoor and outdoor deployment in harsh environments.



Supports setting 9 periods, including three periods each for self-consumption, battery charge, and battery discharge.



Supports 7 intelligent working modes and automatically switch within 10ms.



Silent fanless design with zero-maintenance reliability.

Input DC (PV side)

Max. PV access power	100kW
Max. PV input power	80kW
Max. PV input voltage	1000V
Nominal input voltage	600V
MPPT working voltage range	180V-850V
Number of independent MPPT/strings per MPPT	4/3
MPPT max. current	4*45A
Start-up voltage	200V

Output/Input AC (Grid side)

Nominal apparent power	50kW
Max. apparent power	55kVA
Nominal voltage	380V/400V
Nominal frequency	50Hz/60Hz
Rated current	75.7A/72.4A
Max. current	84A
Power factor	-0.8-+0.8 (adjustable)
THDi	<3%(Nominal Output)
Grid system pattern	3L+N+PE
Max. AC current from utility grid	200A

Output AC (Back-up)

Nominal output power	50kW
Max. output apparent power	55kVA
Nominal output voltage	380V/400V
Nominal output frequency	50Hz/60Hz
Output THDV	<3%
Automatic switch time	<10ms

Battery

Battery type	Li-ion
Battery voltage range	200V-800V
Max. charging/discharging current	2*50A/2*50A
Charging strategy for Li-ion battery	Self-adaption to BMS

Efficiency

Max. MPPT efficiency	99.9%
Europe efficiency	97.5%
Max. battery to load efficiency	98%

Protection

Anti islanding protection	Yes
Insulation impedance protection	Yes
RCD detection	Yes
PV reverse polarity protection	Yes
Output over voltage protection	Yes
Output over current protection	Yes

General Data

Dimensions(L/W/H)in mm	680/342/708
Weight	73kg
Operation temperature range	-30°C~+60°C
Heat dissipation mode	Smart Cooling
IP Class	IP 66
Maximum altitude	4000m
Self-Consumption night	<5W

Features

Transpormerless

LCD display	Yes
Communication interface	WiFi/GPRS/RS485
Standards	EIC 62109-1/EIC 62109-2/EN EIC 61000-6-1/EN EIC 61000-6-3/VDE AR 4105/VDE V 0124-100/NC RfG/PSE/PTP/REE/EN 50549-1/NRS 097