DARFON

HB51 Hybrid Inverter

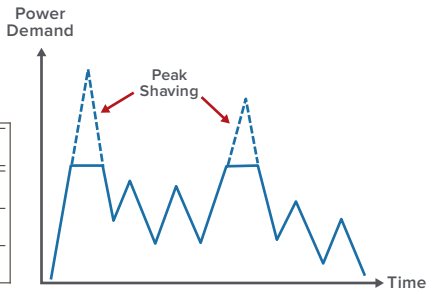
SPECIFICATIONS

AC OUTPUT TO LOAD	WITH GRID ABSENT	WITH GRID PRESENT
Output Power (Continuous) @25°C	5500W	7000W
Overload 40/20/5/1s @25°C & 240V	5500/--/6500/7500W	--/9600/--/--W
Overload 40/5/1s @25°C & 120V	2750/3250/3750W	--
Rated Output Current (RMS)	23A (@120V and 240V)	29A (@120V and 240V)
Output Frequency (Auto Sensing)	50/60 Hz	
Output Voltage and Accuracy	L-N: 120V ± 3%; L-L: 240V ± 3%	
Output Voltage Limits	L-L: 180 to 280V (240V Nominal)	
Total Harmonic Distortion (THD)	< 5% at rated power	
Power Factor	>99%	
AC INPUT FROM GRID		
Automatic Transfer Power Rating / Typical Transfer Time	7000W / 20ms	
Input Voltage Range	L-L: 180 to 280V (240V Nominal)	
Input Frequency Range	45 to 54.9Hz / 55 to 65Hz	
AC OUTPUT TO GRID (GRID SUPPORT)		
Output Power (Continuous) @25°C	5000W	
Grid Feed-In Current Range	0 to 24A (@240V)	
Grid Feed-In Voltage Range	L-L: 211 to 264V ± 3.0V	
Grid Feed-In Frequency Range	49.3 to 50.5Hz / 59.3 to 60.5Hz ± 0.05Hz	
DC BATTERY CHARGER		
Max Charge/Discharge Current	100A/150A	
Output Voltage Range	44 to 58V (48V Nominal)	
Compatible Battery Types	AGM, Gel, Li-ion, $LiFePO_4$, Custom	
GENERAL SPECIFICATIONS		
Weight	33.6kg (74.0 lb)	
Dimensions (HxWxD)	856x455x150mm (33.7x18x6 in)	
Protection Rating	NEMA 1 Indoor / IP20	
Operating Temperature	-20 to 50°C (0°C Min Startup Temp.)	
Storage Temperature	-25 to 70°C (-13 to 158°F)	
Compliances	UL 1741 SA, CSA C22.2, IEEE 1547A, IEEE 1547.1, FCC Class B	

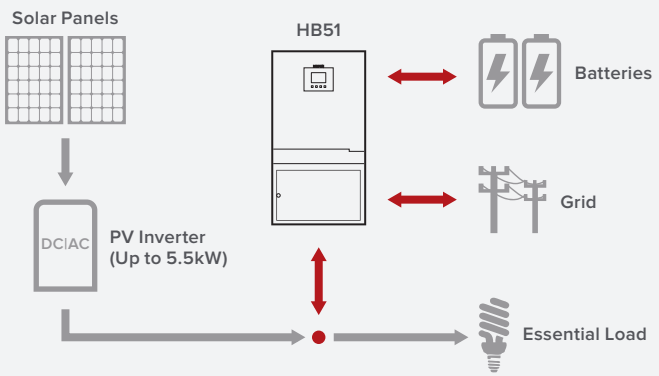
With the Darfon HB51 hybrid transformerless inverter, energy storage can be added to homes and small commercial buildings, with or without a PV system. The HB51 can be AC-coupled with existing PV systems, either with string or micro inverters, to allow continuous use during utility outage. To facilitate easy installation, the HB51's distribution box includes quick disconnect terminals, DC and battery disconnects, AC breakers, battery connectors and optional generator contactor. The HB51 supports a wide range of applications, including Peak shaving, AC coupled, Backup, TOU with or without feed-in, and Remote Communication.

- AC-coupling to string or micro inverters
- Up to 7kW continuous output to load
- Three-wire inverter for 240V and 120V direct connection
- Compatible with Lithium or lead-acid batteries
- 5-year standard warranty with 5-year extension option
- Generator kit [JQ.D3C01.D01] available and sold separately

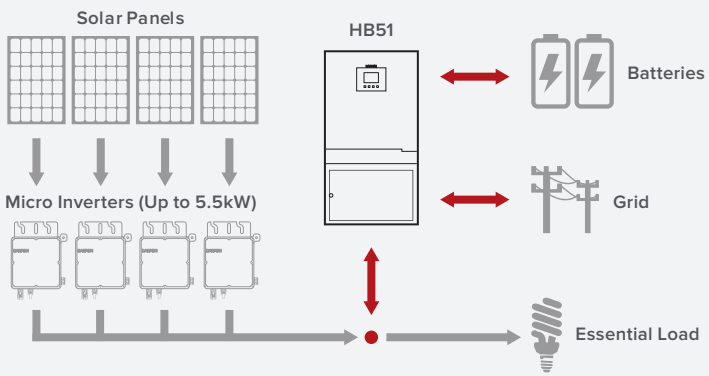
EFFICIENCY	
Peak Battery to Grid	92%
System Standby Power	20W
System Idle Power	< 8W



AC-COUPLING WITH PV STRING INVERTER



AC-COUPLING WITH MICRO INVERTERS



For more product information, visit us at www.darfonsolar.com