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Hybrid Energy Storage Systems

Looking for a hybrid energy storage solution? Whether its a new or existing PV system, Darfon can satisfy either senario with its series of AC- and DC-coupled systems. The H500 series are AC-coupled energy storage systems using the HB51 hybrid inverter, while the H300 series are DC-coupled systems using the H5001 hybrid inverter. Depending on the amount of storage that is needed, the H300 and H500 can be ordered with battery capacities ranging from 7kWh to 29kWh.

- Up to 7kW continuous output to load
- Three-wire inverter for 240V and 120V direct connection
- Available with LNMC or LFP batteries
- Manage and monitor system via control panel
- 5-year standard warranty with 5-year extension option
- · Generator kit [JQ.D3C01.D01] available and sold separately





Hybrid Energy Storage Systems

SYSTEM SPECIFICATIONS

DC COUPLED SOLUTIONS (H5001)		H302	H311	H312	H313	H314	H321	H322	H323
AC COUPLED SOLUTIONS (HB51)		H502	H511	H512	H513	H514	H521	H522	H523
Battery Model		B05LM	B07LF	B07LF	B07LF	B07LF	B10LF	B10LF	B10LF
Battery Quanity		2	1	2	3	4	1	2	3
Capacity @ 25°C		9.8kWh	7kWh	14kWh	21kWh	28kWh	9.7kWh	19.4kWh	29kWh
AC Output Power from Battery	Continuous	2.7kW	5.5kW	5.5kW	5.5kW	5.5kW	5.5kW	5.5kW	5.5kW
	Peak	3.5kW							
	Nominal	3.1kW							







BATTERY SPECIFICATIONS

	B05LM	B07LF	B10LF	
Capacity@ 25°C	4.88kWh (95.4Ah)	7kWh (136.8Ah)	9.68kWh (201.6Ah)	
Battery Chemistry	Lithium Nickel Manganese Cobalt	Lithium Ferrite Phosphate	Lithium Ferrite Phosphate	
Nominal Voltage	51.1V	51.2V	48V	
Continuous Charge Power	3kW with Two Stacked	5kW	5kW	
Continuous Discharge Power	3kW with Two Stacked	7kW	9.6kW	
Peak Discharge Power	3.7kW with Two Stacked	10KW	15kW	
Continuous Charge Current	66A with Two Stacked	100A	100A	
Continuous Discharge Current	66A with Two Stacked	136A	200A	
Terminal Type / Location	KST BMC2S / Side	Amphenol HVSP-0R6-MHX / Side	Amphenol HVSP-0R6-MHX / Front	
Depth of Discharge (DOD)	80%	100%	100%	
Cycle Life [80%DOD, @25°C]	2500 Cycles	> 60% capacity @ 6000 cycles	> 60% capacity @ 6000 cycles	
Communication Interface	RJ45	RS485	RS485	
Battery Management System	OVP/UVP/OTP/UTP/OCP/SCP	OVP/UVP/OTP/UTP/OCP/SCP	OVP/UVP/OTP/UTP/OCP/SCP	
Scalable	Up to 2 units (Master Box Required)	Up to 4 units	Up to 3 units	
Product Weight	45.2kg (99.6 lbs)	88kg (194 lbs)	180kg (396.8 lbs)	
Product Dimensions (W*H*D)	610x710x167mm (24x28x6.6in)	620x694x180mm (24.4x27.3x7.1in)	600x1100x600mm (23.6x43.3x23.6in)	
Installation Method	Wall-mount	Wall-mount	Free-Standing	
Color	Silver	Black or White	Black or White	
Protection Rating	NEMA 1 / IP20	NEMA 1 / IP20	NEMA 1/IP20	
Operating Temperature	-10 to 45°C (14 to 113°F)	-20 to 60 °C (-4 to 140°F)	-20 to 60 °C (-4 to 140°F)	
Min. Cold Charge Temperature	0°C (32°F)	0°C (32°F)	0°C (32°F)	
Storage Temperature	-40 to 60°C (-40 to 140°F)	-40 to 60°C (-40 to 140°F)	-40 to 60°C (-40 to 140°F)	
Compliance	UL1642, UN38.3, CE	EN 61000 chapter 4.2,4.3,4.5,4.6 / EN55022 / EMC (CE)	EN 61000 chapter 4.2,4.3,4.5,4.6 / EN55022 / EMC (CE)	

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

