

The H7, B17, and T1 are part of Darfon's outdoor-rated energy storage solution. The H7 is a hybrid inverter that can support loads of up to 7.6kW, the B17 is a 17.5kWh high-voltage LFP battery, and the T1 gateway has an ATS and data logger to support partial or whole home backup.

The H7 can be installed in a new DC-coupled PV system, replace an existing string inverter or be AC-coupled to an existing PV system.

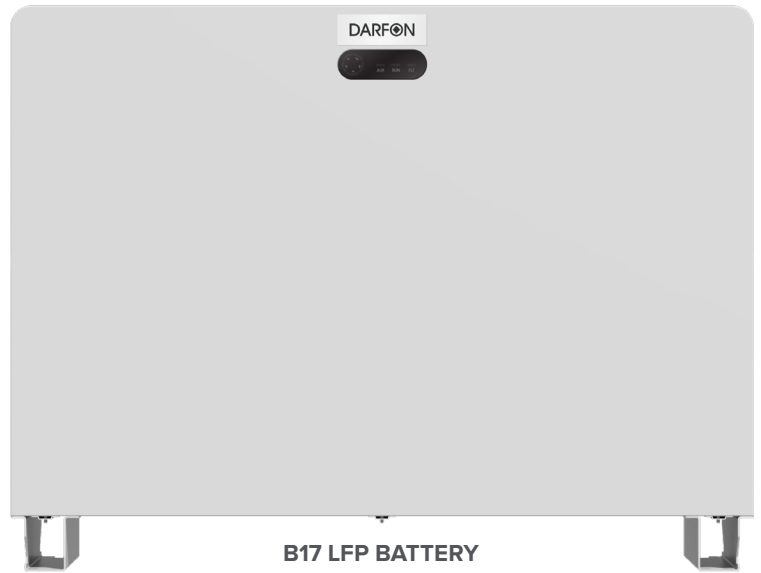
The B17's high voltage design increases the conversion efficiency, lowers the current, and reduces the cable thickness. There are 6 battery modules in the B17, and each module can be installed or swapped in-situ. The low enclosure height means the battery can be installed beneath the inverter, reducing the installation footprint.



T1 GATEWAY



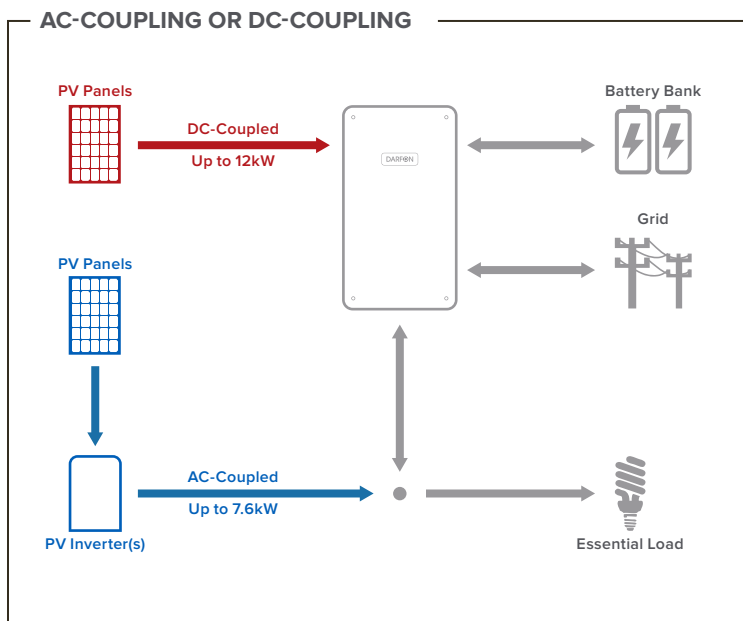
H7 HYBRID INVERTER



B17 LFP BATTERY

OPERATING MODES	Charge From	Grid Feed-In	PV Use Priority			Load Priority		
			1	2	3	1	2	3
Back-up	PV/Grid	PV	Batt.	Load	Grid	PV	Grid	Batt.
Self-Supply	PV*	PV	Load	Batt.	Grid	PV	Batt.	Grid
Limited Export	PV/Grid	PV/Batt.	Load	Batt.	Grid	PV	Batt.	Grid
Time-of-Use (TOU)	User Defined							

*The battery will charge from the grid under certain conditions. See inverter's manual for more details.



- Applications: partial or whole home backup, time-of-use, self-consumption, going off-grid, net-metering, remote control
- Up to 12kW of PV with 4 MPPT when DC-coupled or 7.6kW when AC-coupled
- External wireless display to control and see the current status of the system from inside the home.
- Both inverter and battery can be installed outdoors for easy access.
- Detailed monitor and system management remotely via the cloud monitoring portal or mobile apps

H7 INVERTER SPECIFICATIONS

SOLAR INPUT	
Maximum Power (DC)	12 kW(3kW per String)
Operation Voltage Range (DC)	120 - 500VDC
MPPT Voltage Range (DC)	230 - 410VDC
Maximum Input Current (DC)	13A per String
Maximum Power (AC)	7.6kW
AC OUTPUT TO LOAD @25°C	
Continuous Power / RMS Current	7.6kW / 32A
Overload w/Grid @240(120)V	> 7.6(3.8) kW for 30s
Overload w/o Grid @240(120)V	< 12(6) kW for 5s or < 15(7.5) kW for 1s
Overload Trip @240(120)V	> 15(7.5) kW w/o Grid
Output Frequency	60Hz
Output Voltage and Accuracy	L-N: 120V ± 5%; L-L: 240V ± 3%
Total Harmonic Distortion (THD)	< 5% at rated power
AC INPUT FROM GRID	
Maximum Power	9600W
Input Voltage Range	L-L: 120 to 288V (240V Nominal)
Automatic Transfer Relay Rating	48A
Typical Transfer Time	30ms
Input Frequency Range	45 to 65Hz
AC OUTPUT TO GRID (GRID SUPPORT)	
Continuous Power / RMS Current	9600W / 40A
Grid Feed-In Voltage Range	L-L: 211 to 264V ± 3.0V
Grid Feed-In Frequency Range	59.4 to 60.4Hz
EFFICIENCY	
Peak/CEC Weighted (PV to Grid)	96.5% / 96%
Battery - Grid (Single Trip)	96%
Battery to Grid (Round Trip)	90%
System Standby Power	20W
DC BATTERY CHARGER	
Max Charge/Discharge Current	23A/33.3A
Output Voltage Range	240 to 340V (300V Nominal)
Grid Power Factor Correction	> 98%
GENERAL SPECIFICATIONS	
Weight	38.2kg (84.2 lb)
Dimensions (WxHxD)	450x809x254mm (17.7x31.8x10.0in)
Protection Rating	NEMA 3R
Operating Temperature	-20 to 55°C (-4 to 131°F), derated > 40°C (104°F)
Minimum Startup Temperature	0°C (32°F)
Storage Temperature	-25 to 70°C (-13 to 158°F)
Humidity	25% - 95% non-condensing
Maximum Elevation	3000 m (9843 ft)
Limited Warranty	10 Years

B17 BATTERY SPECIFICATIONS

Usable Capacity	17.5kWh (57 Ah)
Battery Chemistry	Lithium Ferrite Phosphate
Operating Voltage	260 to 340V
Continuous Charge Power	10kW
Continuous Discharge Power	10kW
Peak Discharge Power	17kW @5 seconds
Continuous Charge Current	30A
Continuous Discharge Current	30A
Terminal Type	Amphenol C-10-765947
Depth of Discharge (DOD)	100%
Cycle Life [80%DOD, @25°C]	6000 cycles
Communication Interface	RS485
Battery Management System	OVP, UVP, OTP, UTP, OCP, SCP
Scalable	Up to 1.5 units
Weight	260kg (573.2 lb)
Dimensions (WxHxD)	1140x818x300mm (44.9x32.2x11.8in)
Installation Method	Floor Standing
Protection Rating	IP55
Operating Temperature	-20 to 45 °C (-4 to 113°F)
Min. Cold Charge Temperature	-20°C (-4°F)
Storage Temperature	-20 to 40°C (-4 to 104°F)
Limited Warranty	10 Years

T1 GATEWAY SPECIFICATIONS

AC Voltage (Nominal)	240 V (Line-to-Line)
Feed-in Type	Single Phase
Grid Frequency	50/60Hz
Nominal Current	200A
Max Short Circuit Current	16kA
Overvoltage Category	Category III
Weight	20.4 kg (45 lb)
Dimensions (WxHxD)	508x406x203mm (20x16x8in)
Protection Rating	NEMA 4 / IP66
Operating Temperature	-20°C to 50°C (-4°C to 122°F)
Operating Humidity (RH)	Up to 100%, Condensing
Maximum Elevation	3000 m (9843 ft)
Limited Warranty	5 Years

COMPLIANCES

H7 Inverter	UL 1741 SA, FCC Class B, IEEE 1547, IEEE 2030.5, CSA C22.2, CSIP/E5000, SunSpec
B17 Battery	UL 1642, UL 1973, UN38.3
T1 Gateway	UL 508A (Enclosure), UL 1008 (ATS)
System (H7 + B17)	UL 9540, UL 9540A, SGIP