

HPB54V-180A DC Load Bank

- 500A/hr Teleco Battery Discharger
- Manual constant current control
- Lead Acid or Ni-cad battery testing
- BattScan discharge data logger system
- BattScan smart fuse box cable protection
- BattLife software compatible
- Safety isolation contactors
- Fan fail protection
- Portable single load bank design



Case Size A

The Hillstone **HPB54V-180A** is a 54V 180A DC load bank which allows operator manual constant current control of discharge testing 54V 500Ahr lead acid batteries at the C3 rate.

The load bank is supplied with a Safety First BattScan Fuse Box which provides total protection of the battery, cable set and load bank and also datalogs the discharge test for detailed battery maintenance reporting using BattLife battery software.

The unit has force cooled high power resistor elements controlled by panel mounted switches and safety features including:

- fan fail auto shut-down,
- emergency stop push button
- battery isolation of each load circuit via continuously rated DC contactors.

Battery Discharge Performance Table

Nom Battery Voltage	No of cells	Start of test voltage	End of test voltage	Battery Capacity	C3 rate
48V	24 lead acid	52V	43.2V	500Ahrs	133A

HPB54V-180A Load Bank Discharge Performance Table

Nom Battery Voltage	Discharge range Amps	End of test voltage
48V	0 to 180A at 54V	140A at 43V

For lower battery voltages the available constant current discharge rate will reduce proportionally.

HLB Included Features		HPB54V-180A
User Features & Controls:-		
Manual load bank regulation and control of the discharge test		✓
High powered fan using auxiliary mains supply		✓
DC load banks are designed using mica resistor technology		✓
Electrical Safety Package:-		
Master On / Off control		✓
Emergency stop push button		✓
Battery isolation from DC rated contactors		✓
Electrical Measurement:-		
Panel mounted 4mm Voltage sockets		✓
Panel mounted 4mm Current sockets		✓
Electrical Alarm Package:-		
High Volts (Common Alarm)		✓
Reverse Polarity (Common Alarm)		✓
Open Circuit Voltage (Common Alarm)		✓
Movement:-		
Swivel Castors		✓
Forklift Pockets (Case Size E)		✓
Mechanical Alarm package:-		
Cooling Fan Motor Start Protection		✓
Over Temperature Alarm (Common Alarm)		✓
Fan Fail Alarm (Common Alarm)		✓
User operation		
To perform a manual constant current discharge testing the operator uses panel mounted switches to set the current and manually adjusts the load to regulate the discharge current throughout the test.		✓

HPB54V-180A Specification

Type Ref	HPB54V-180A	
Nominal Voltage	48V	24 lead acid cells
Maximum Ratings Voltage & Current	54V DC	180A
Rating	9.7kW continuous rating at full load, max voltage	
Minimum Load Step Resolution	<1A	
Resistor tolerance	<2%, mica resistor technology	
Multimeter Voltage Test Sockets	4mm Voltage sockets	Red & Black
Multimeter Current Test Sockets	4mm Current sockets	2 x Yellow
Shunt	0.5 class brass ended	200A 200mV
Auxiliary Mains Supply	230/240V Single phase 50/60 Hz	
Auxiliary Mains Cable Set	2 metre mains cable set with UK 13A or CE 16A plugs	
DC Cable Set	3m DC Cable Set Included	
Case Size & Construction	Case Size A	Lightweight Aluminium
Movement	Swivel castors & carrying handles	
Finish	Powder coated textured finish	
Protection Rating	IP21	
Cooling	Force air cooling, horizontal fan	
Temperature	Operating: 0 – 40 °C Storage: 0 – 80 °C	
BattScan Software	BattScan-DL rev001	

Standards And Quality Assurance

The HLB DC Load Bank Range is manufactured in the UK to EU standards and ISO procedures:

Low Voltage Directive 2006/95/EC
 EMC Directive 2004/108/EC
 BSEN61000-6-3 2007 amendments for 2011
 BSEN61000-6-1 2007
 BSEN61000-6-4 2007 amendments for 2011
 Hillstone Products Quality Assurance procedures ISO 9001:2015



Notes

- Units are designed for indoor use in a clean, dry and well ventilated environment.
- The available current and ratings are proportional to the end of test voltage.
- Information in technical literature, quotations or datasheets are intended to be correct at the time of publication. Hillstone Products Ltd bears no responsibility for the accuracy of any information given.
- We reserve the right to make detailed changes to specification, components, dimensions or weights at the time of design or manufacture without prior notice.
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HPB54V-180A

Channel

52V

43V

Amps

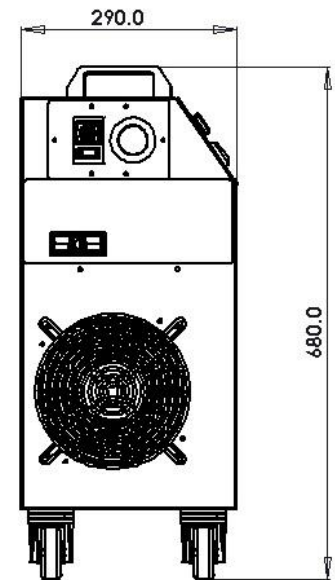
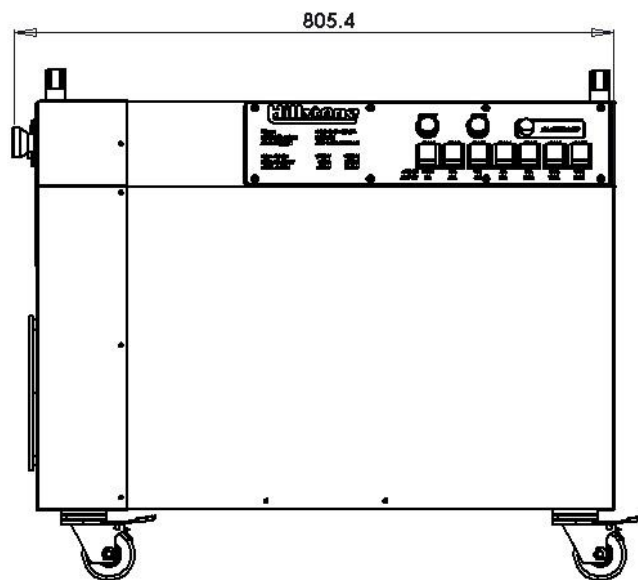
Amps

1	1	0.8A
2	2	1.7A
3	4	3.3A
4	8	6.6A
5	16	13.2A
6	32	26.5A
7	56	46.3A
8	56	46.3A
Total	175A	144.7A

Case Size A



Case Size A



Optional Accessory Battery Fuse Connection Box

The Battery Fuse Box provides cable protection with in line fuses between the battery & the load bank for both the +Ve & -Ve cables

Insulated panel mounted sockets provide safe cable connections and are identified as Red for +Ve & Black for -Ve



Optional Accessory Battery Fuse Connection Box with BattScan Data Logger

The **BattScan** data logging systems is an integral part of the Battery Fuse Box as it provides the ability to record the discharge performance to an SD card for data exporting **Volts - Amps - Temperature - A/hrs - elapsed time** to a laptop running **BattLife**



BattLife

The **BattLife** software app is a battery maintenance tool used for auditing and maintenance of standby batteries used in DC systems, UPS Systems and Generators.

The **BattLife** software app allows engineers to extend the life of the battery and prevent premature failures by combining discharge results with impedance or conductance data gathered over the life of the battery.

The **BattLife** gives true battery historical state of health understanding by integrating load bank capacity testing with conductance / impedance readings

The key BattLife modules are:

- Site Manager
- Battery Manager
- Test Manager
- Report Manager



[Download BattLife](#)