

BATT-HYBRID REJUVENATOR

- ✓ MultiBattery
- ✓ MultiVoltage
- ✓ MultiAmp
- ✓ Programmable
- ✓ Automatic
- ✓ Portable
- ✓ Robust Casing



Design to rejuvenate all types of lead acid batteries of any size, brand, application, and capacity. One machine for all types of batteries!

Description

The *BattHybrid Rejuvenator* is innovative solution to regain the lost capacities of all types of lead acid batteries despite size, brand, age, and application. Designed to be portable and light weight which makes it easy to carry-on and to transport in airplane as luggage.

The BattHybrid is also battery equalizer and charger for both lead acid batteries used in all light and heavy applications such as cars, trucks, power inverters, UPS, golf carts, electric rickshaws, forklifts, and telecommunications.

The BattHybrid can diagnose, rejuvenate, equalize, and charge batteries to recover their full capacity or full state of charge. It can service lead acid batteries made of Gelatinous electrolyte, AGM, VRLA, and all flooded types of batteries.

Multivoltage— the BattHybrid is a multivoltage charger, equalizer, and rejuvenator for all types of lead acid batteries of any voltage design that is in the market today.

Multibattery—the BattHybrid is capable of charging, equalize, and rejuvenate more than one battery at the same time. It can service a bank of batteries of up to 96 batteries!

Multibattery capability here also means that the BattHybrid can regenerate batteries that are made of lead acid electrolyte such as Gel and flooded. It also can service all batteries that are sealed, vented, AGM, and VRLA.

MultiAmps— the BattHybrid can charge, equalize, and rejuvenate batteries with capacities of ranging from 10 to 1200 amps-hour.

MultiVoltage		MultiBattery
VDC	Batteries	Types
2	96	Gel
6	32	AGM
8	24	VRLA
12	16	UPS
24	8	Car/Trucks
36	5	E-Rickshaws
48	4	Inverter
60	3	Forklift
80	2	All types

Fully Automatic— means that the BattHybrid software manages and monitors its different functions and capabilities when servicing any type of lead acid battery.

Electrical feature—the BattHybrid operates on any worldwide AC power input from 220 to 240 volts, either 50/60 Hz.

Charging methods— Recon, Charge, and Equalize are the main charging modes. *Recon* stands for *reconditioning* or restoring full capacity. Its main feature is for reactivating the dormant electrochemical energy (state of charge) of any battery. *Charge* is for simply replenishing or charging batteries that still can accept charge. *Equalize* is a charging force that brings all cells in a battery to same level voltage and electrolyte's specific gravity.

Fault Alarm— The BattHybrid is also equipped with a fault alarm that alerts if stops working due to a failure in electrical power supply to the machine or if any of the batteries connected collapses during the regenerative or charging load.

Monitors charge or regenerative progression— the software in the BattHybrid monitors the recharging and regenerative load applied to a battery. This monitoring assures that the battery is gaining voltage and capacity. It also displays what is the state of charge of the battery and how much capacity it has gained at any time during the rejuvenation or charging process. If an abnormal charging progression takes place, the monitoring feature in the BattHybrid will terminate the charging load as it means that the battery or batteries exhibit internal battery problems, i.e.: shorted cell. This feature prevents the battery from overheating and exploding.



Compact unit casing— the BattHybrid is a compact unit that is easy to transport and carry on to anywhere. Casing is made of robust plastic that has wheels and handle. It measures 27cm height x 53cm length x 41cm width and 20Kg weight.

Time topping mode— this feature allows the BattHybrid to stop when the battery finished charging or regenerating. This avoids battery deterioration due to thermal runaway, which is a result of lengthy charging loads.

Accessories— The BattHybrid Rejuvenator it is accompanied with accessories necessary for servicing batteries. The accessories that should be delivered to you with the BattHybrid are:

- Power supply cable to connect to your electrical power outlet.
- One set of cable with clamps to connect to the output plug of the BattHybrid.
- Set of cables leads to connect the batteries in series to the BattHybrid.
- Five hydrometers for the measuring of the specific gravity of the electrolyte.
- A set of safety glasses.
- A set of respiratory masks.
- A set of nitrate gloves to be used when working with batteries.
- A set of fuses (2-40Ah J-Class 600V & 2-5A 250V glass type).
- One User Manual explaining the operation of the BattHybrid.
- Electrochem Battery Restoration Process Manual.



Constructed as per IEEEMA & IEEE Standards

SPECIFICATIONS

FEATURES	DESCRIPTION
FUNCTIONS	Diagnose, Reactivates, Charges, and Desulfates lead acid batteries for cranking or deep cycle applications.
CAPABILITITES	<p>Can regenerate simultaneously the following batteries: Total voltage of the battery bank: 196VDC.</p> <ul style="list-style-type: none"> • 8 twenty-four-volt military cranking batteries; or • 16 twelve-volt cranking or deep cycle batteries; or • 24 eight-volt deep cycle batteries in 24 hours, or • 34 six-volt deep cycle batteries in 24 hours; or • 96 two volt cells used on telecoms of any amp-hour capacity. <p>Batteries can be of any configuration, make, brand, and application. Specially made to service also all types of telecom and UPS batteries (AGM, VRLA & Gel) or any industrial forklift battery available on the market today.</p>
DIMENSIONS	Height: 10.5 in. x Length: 21 in. x Width: 16 in. & Weight: 45 Lbs 26.67cm x 53.34cm x 40.64cm & 20 Kg
FRAME	Robust hard plastic rectangular casing made for durability and mobility.
AC INPUT	200-240 VAC at 50/60 HZ
AC CIRCUIT PROTECTION	100 amps 600 VAC & VDC, circuit breaker, fast acting & time delay
DC OUTPUT PROTECTION	100 amps 600 VAC & VDC, circuit breaker, fast acting & time delay
DC CURRENT OUTPUT	1-50 Amps DC
POWER SUPPLY & LCD SCREEN PROTECTION	5 amps 250 VAC & VDC, fast acting & time delay fuse
VOLTAGE PROTECTION	Automatically restores when short circuit is removed.
REVERSE POLARITY	Protection included.
COOLING PROTECTION	Metal casing and internal heat sinks with cooling fans.
CHARGER INDICATOR	Graphic display screen indicates activities.
OPERATING ENVIRONMENT	Ventilated indoor; can be mobile or stationary permanently.
OPERATING TEMPERATURE	Any temperature between 0°C to 56° C
TECHNOLOGY USED	Microprocessor with integrated imbedded exclusive software
SAFETY STANDARD	Build as per the UL specifications. Class I-grounded.
CABLES & WIRES	Meets following standards: Indian Electrical & Electronics Manufacturers' Association (IEEMA) standard; the UL and IEEE (USA) and the International Electrical Commission (IEC) line cords standards.
WARRANTY	One year parts and labor.