

MULTI-STAGE BATTERY CHARGING

Abso Battery Chargers use advanced charging algorithms to rapidly and safely replenish large capacity AGM, Gel, Flooded and Lithium batteries to peak efficiency. Abso Chargers deliver four primary charge stages: Bulk, Absorption, Float and Maintenance. This results in a battery that is ready for use faster and improves battery life.

IMPROVED BATTERY LIFE



OFF-SEASON GUARD

By leaving your Abso Charger connected to your batteries, even during off-season storage periods when the batteries are not in use, the Abso Charger will automatically maintain your battery's charge by running a fresh charge algorithm every 7 days. The Abso Charger's intelligence ensures that the batteries are maintained so they are in top performance when the new season begins and you are ready to use your batteries.

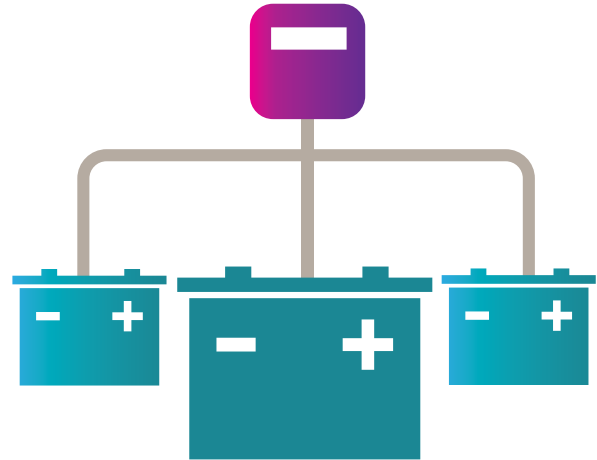


Why is this important?

Because batteries self-discharge over time, even when sitting on a shelf. And discharge can occur even faster if left connected to alarms, electronics, and engine computers that may draw a small amount of power even when turned off.

BANK PRIORITIZATION

The Abso Charger is a Three-bank battery charger that allows the user to decide which battery is the most important. It will deliver a priority charge to Bank One, allowing this bank to get charged the quickest, then shift the cycle to battery banks Two and Three. In the event that all three banks need a recharge, an override function can recover all three banks quickly and evenly before switching back to Bank One Priority.



INTELLIGENT CHARGING

The smart Abso Charger will regulate its output based on the loads connected to your battery banks. If one battery is discharging quickly due to loads on the battery, Kisaе's Abso charging technology will automatically increase the rate of charge to that bank.



Selectable Battery



Abso Chargers have a programmable setting for the new Lithium battery technology. The Abso Charger can charge AGM, Gel, Flooded and Lithium batteries.

Abso Battery Chargers

Maintenance-free Battery Protection
 Priority Bank Charging
 Commercial / Residential / Leisure Use



Abso Battery Chargers	AC 1220	AC 1240	AC 1260	AC 2430
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Output Rating

Output Voltage	12V	12V	12V	24V
Output Current (Maximum)	20A	40A	60A	30A

DC Output

Selectable Battery Type	Gel, AGM, Flooded, Lithium, Program	Gel, AGM, Flooded, Lithium, Program	Gel, AGM, Flooded, Lithium, Program	Gel, AGM, Flooded, Lithium, Program
Charge	14.2 - 15.5V	14.2 - 15.5V	14.2 - 15.5V	28.4 - 31.0V
Float	13.4 - 13.8V	13.4 - 13.8V	13.4 - 13.8V	26.8 - 27.6V
Equalize (Flooded Battery Only)	16.0V	16.0V	16.0V	32.0V
Charging Control	Three / Two Stages, Program	Three / Two Stages, Program	Three / Two Stages, Program	Three / Two Stages, Program
DC Output Bank	Three	Three	Three	Three
Parasitic Current	< 2mA	< 2mA	< 2mA	< 2mA

AC Input

AC Input Voltage (Nominal)	120, 230, 240VAC	120, 230, 240VAC	120, 230, 240VAC	120, 230, 240VAC
AC Input Operating Range	90 - 265VAC	90 - 265VAC	90 - 265VAC	90 - 265VAC
AC Input Frequency Range	47 - 63Hz	47 - 63Hz	47 - 63Hz	47 - 63Hz
Power Consumption (Full Load)	350W	700W	1050W	1050W
Power Factor Correction	Yes	Yes	Yes	Yes

Display Panel

Display	LCD with back lighting
Digital Display	Voltage, Current, Status and Error Code

Protection

Reverse Battery	Yes	Yes	Yes	Yes
Cooling	Forced Ventilation	Forced Ventilation	Forced Ventilation	Forced Ventilation
Output Short Circuit	Yes	Yes	Yes	Yes
Ingress Protection	IP 32	IP 32	IP 32	IP 32

Enclosure

AC Input Connection	Hardwire / AC Input Cord (Schuko, UK, Australia plug)			
DC Output Connection	Heavy Duty Studs			
Weight	5.3 lbs.	5.7 lbs.	8.8 lbs.	8.8 lbs.
Dimension	11.6 x 8.1 x 3.4"	11.6 x 8.1 x 3.4"	14.0 x 8.1 x 3.8"	14.0 x 8.1 x 3.8"



AC 1220 : 20A/12V Charger



AC 1240 : 40A/12V Charger



AC 1260 : 60A/12V Charger



AC 2430 : 30A/24V Charger

Accessory (Optional)

Remote Panel	For viewing unit status, adjusting settings, and for connecting the chargers in parallel
Battery Temperature Sensor	For battery charging voltage adjustment

Abso DC - DC Chargers

In-Vehicle Optimal Charge and Maintenance for Auxiliary Batteries

KISAE DC to DC Chargers allow you to charge your household battery bank from a solar panel or from your engine battery – no need to wait until you connect to the grid. They provide dual input MPPT Solar input and Auxiliary battery input with maintenance-free protection for your batteries and solar panels. Smart, multi-stage charging ensures your batteries are charged the way the manufacturers recommend, resulting in maximized battery life. Compact design and small product footprint mean these chargers can be installed in tight areas. Easy-access connectors make installation a snap.

Product Features include:

Microprocessor controlled multi-stage charging algorithms: (Bulk, Absorption, Float) for Gel, AGM and Flooded batteries with equalization for Flooded batteries.
MPPT solar regulator provides maximum power from solar panels to battery.

Silent Mode for quiet operation.

Optional Remote for viewing system information and advanced program settings.



Abso DC - DC Chargers



Optimal Charge and Maintenance

Wall Mountable

Commercial / Leisure Use

Abso DC - DC Battery Charger	DMT 1230	DMT 1250
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DC Controller Output (Battery)

Output Current (Maximum)	30A	50A
Output Voltage Range:		
Charge	13.5 - 15.5V	13.5 - 15.5V
Float	13.0 - 13.8V	13.0 - 13.8V
Equalize	15.5V	15.5V
Charging Control	5 stages (Test/Bulk/Absorption/Float/Recharge)	5 stages (Test/Bulk/Absorption/Float/Recharge)
DC Output Bank	One	One
Selectable Battery Type	Gel, AGM, Flooded, Lithium, Program	Gel, AGM, Flooded, Lithium, Program
Parasitic Current	< 10 uA	< 10 uA
Efficiency	> 90%	> 90%

DC Input (Battery/Alternator)

DC Input Range	10.5 - 32Vdc	10.5 - 32Vdc
DC Input Nominal Operation	12.8V for 12V charging system 25.6V for 24V charging system	12.8V for 12V charging system 25.6V for 24V charging system
Engine Start Control: ON	DC input from Battery/Alternator	DC input from Battery/Alternator
Engine Start Control: OFF	DC input from PV input (if available)	DC input from PV input (if available)

DC Input (PV Input)

DC Input Range	10 - 45 Vdc	10 - 45 Vdc
DC Input Nominal Operation	17.5Vdc for 12V PV panels connected in parallel 35.0Vdc for dual 12V PV panel connected in series	17.5Vdc for 12V PV panels connected in parallel 35.0Vdc for dual 12V PV panel connected in series
MPPT Tracking Efficiency	> 98% (Target)	> 98% (Target)

DC Output Protection and Features

Reverse Battery	Yes (shutdown), Auto Reset	Yes (shutdown), Auto Reset
DC Output Short Circuit	Yes (shutdown), Auto Reset	Yes (shutdown), Auto Reset
Over Charge	Yes (shutdown), Auto Reset	Yes (shutdown), Auto Reset
Cooling	Force air ventilation	Force air ventilation

Display Panel

Display	LED Display with back lighting	LED Display with back lighting
Digital Display	Voltage, Current, status and Error Code	Voltage, Current, status and Error Code

Accessory (Optional)

Remote Panel	For viewing unit status, adjusting settings, and for connecting the chargers in parallel
Battery Temperature Sensor	For battery charging voltage adjustment

Abso DC - DC Chargers

System Diagram
PV Energy Input Charge
Commercial / Leisure Use

