

Ion-X Battery Charger – IX-1220E-115



HDM's Ion-X Battery Charger incorporates a patented energy conversion technology that rapidly charges the battery while extending battery life. Utilizing an intelligent microprocessor, the charger allows a high rate of charge to the battery without overheating the battery, thereby significantly reducing charge time. The Ion-X Adaptive Battery Charger prevents loss of electrolyte, gassing, sulfate buildup on battery plates and over-charging, all of which contribute to longer, healthier battery life.

CHARGING METHOD

3-Stage with Temperature Derated Charge for AGM

Bulk	Maximum charging current to battery. Duration depends on AHR rating.
Absorption	Constant absorption voltage to battery. Duration depends on AHR rating.
Float	Constant float voltage with load current on demand.

ELECTRICAL

AC Input Voltage	115VAC
AC Input Voltage Range	100 ~ 130VAC
AC Input Frequency	54 ~ 66Hz
AC Input Current	4A RMS (Maximum) / 3A RMS (Nominal)
AC Input Fuse (Internal)	6A
DC Charge Voltage Range	9 ~ 14.3V _{DC}
DC Float Voltage	13.5V _{DC}
DC Charge Current	20A _{DC}
DC Charge Current Limit	20A _{DC}
DC Over-Voltage Protection	16V _{DC} ¹
DC Output Fuse	40A
Efficiency	82% Typ
Temperature Derated Charge	T _{Thermistor} ≥ +75(±15%)°C

GENERAL

Dimension (LxWxH)	10" x 8.7" x 2.7"
Weight	8 lbs
Construction	Extruded Aluminum in Black Anodized Finish
AC Input Connections	72" 18AWG/3C with NEMA 5-15P 3-Prong Plug
DC Output Connections	48" 12AWG Red with 3/8 Stud Ring Terminal 48" 12AWG Black with 3/8 Stud Ring Terminal
Cooling	Natural Convection
Operating Temperature	-40 ~ +55°C
Storage Temperature	-40 ~ +85°C
MTBF Prediction ²	TBD ²



Standard Features

- 12V_{DC}/20A_{DC} Isolated Charger
- 3-Stage Charging Method
- 1260V_{AC} Isolation
- Auto-Restart Mode
- Current Limiting
- Overload Protection
- Over-Voltage Protection
- Short Circuit Protection
- Temperature Derated Charge
- Auto Maintenance Mode
- LED Status Indicator

Specifications typical at 25°C unless otherwise stated and are subject to change without notice.

1 IX-1220E-115 charger will auto-recover and restart when parameters are within operating limits and LED will return to blink Green.

2 Calculated per Bellcore TR-NWT-000332 method. Products are covered by 1 year limited warranty.

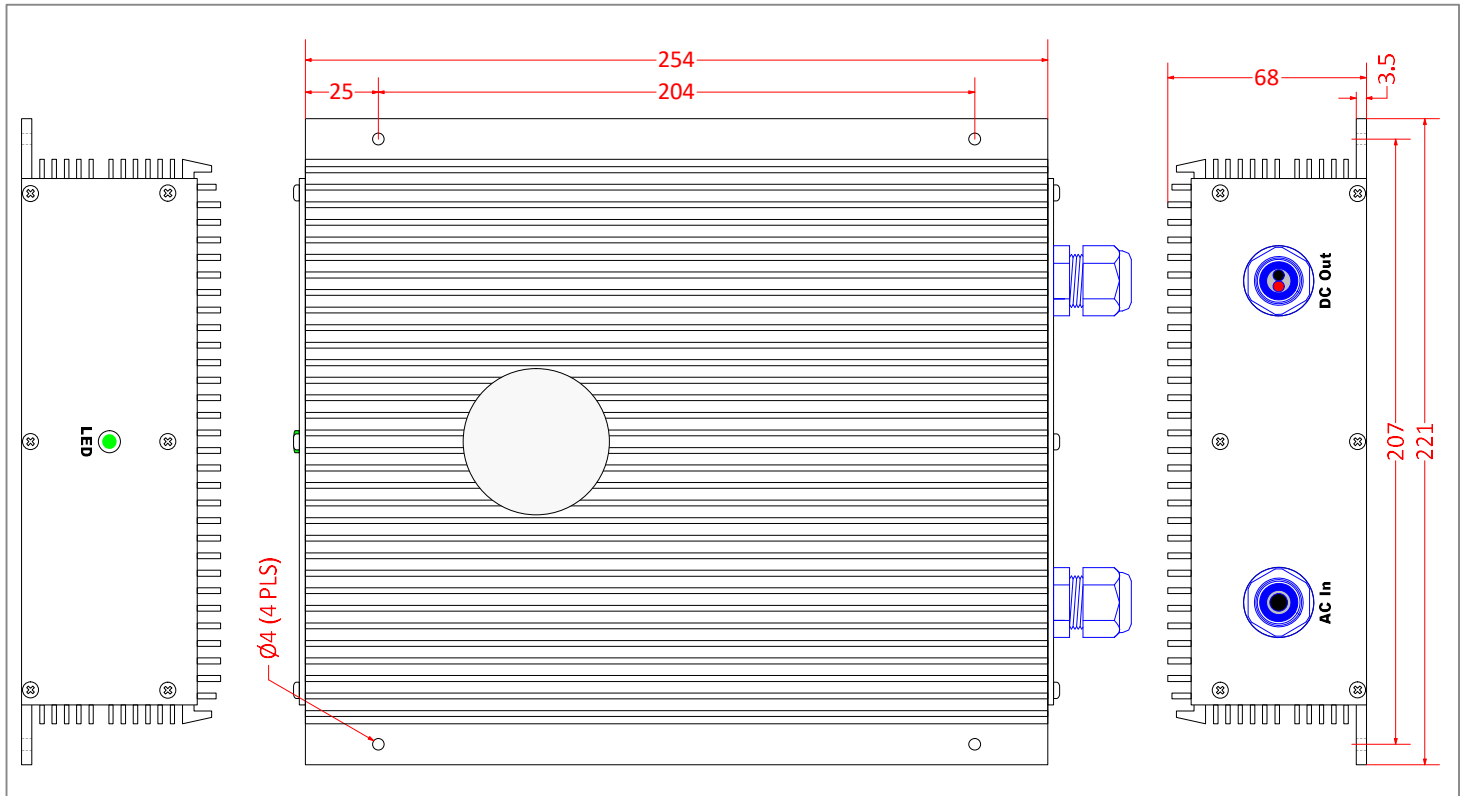
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Ion-X Battery Charger Diagram



LED	STATUS INDICATOR	CHARGE STATUS
	Steady Green	100%
	Flashing Green	80% ~ 100%
	Flashing Orange	50% ~ 80%
	Flashing Red	Less than 50%
	Blank	No AC In

All dimensions in millimeters unless otherwise specified.

Product appearance may vary by model or revision. Please consult with HDM Systems representatives.

MODEL	CHARGE VOLTAGE/ CURRENT	DESCRIPTION
IX-1220E-115	12V _{DC} / 20A _{DC}	Encapsulated Charger
Add suffix after model name for optional features and accessories.		
E - Encapsulated Charger		

