



**VISION GROUP**  
Shenzhen Center Power  
Tech.Co.Ltd.,

# HF12-1010W-X

**12V 210Ah**

## Overview

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special oneway valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.



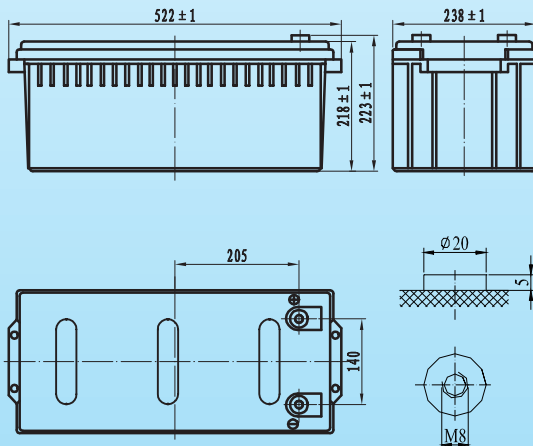
## General Features

- Positive and negative plates in lead-calcium tin alloy;
- Superior energy density;
- Operates at a low internal pressure;
- Gas Recombination;
- Usable in any orientation;
- A recognized component of UL;
- Very high power output;
- Application specific designs;
- A couple Range from 13W to 1010W per cell for 10'@1.60Vpc;
- Six months shelf life at 20°C;
- Design life 10 years.

## Dimensions and Weight

Length(mm / inch)	522 / 20.6
Width(mm / inch)	238 / 9.37
Height(mm / inch)	218 / 8.58
Total Height(mm / inch)	223 / 8.78
Approx. Weight(Kg / lbs)	67.0 / 148.0

\* Weight deviation:  $\pm 5\%$



## Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity 77°F(25°C)	
10 min wattage @1.6V	1010W/cell
20hour rate (11A, 10.5V)	220Ah
10hour rate (21A, 10.8V)	210Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	$\leq 3.0$ mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	1350A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	63.0A
Temperature compensation	-30mV/°C
Standby use	2.20-2.30VPC
Temperature compensation	-20mV/°C

## Discharge Constant Current (Amperes at 77°F25°C)

End Point						
Volts/Cell	10min	15min	20min	30min	45min	60min
1.60V	565	447	370	289	211	163
1.65V	539	428	354	277	202	157
1.70V	514	409	338	266	194	151
1.75V	488	390	321	254	185	144
1.80V	463	371	305	242	176	138

## Discharge Constant Power (Watts at 77°F25°C)

End Point						
Volts/Cell	10min	15min	20min	30min	45min	60min
1.60V	1010	806	650	509	375	290
1.65V	965	775	625	494	365	283
1.70V	920	743	600	480	355	275
1.75V	875	712	575	465	345	268
1.80V	830	680	550	450	335	260

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



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