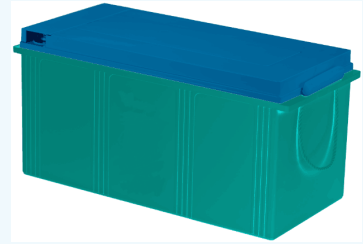


### Overview

The new VISION HFS series batteries are designed for UPS Standby Power Applications requiring high power output. Computer designed grids and optimized plate paste formula produce high energy density and long lasting uninterrupted power for critical systems.



### Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

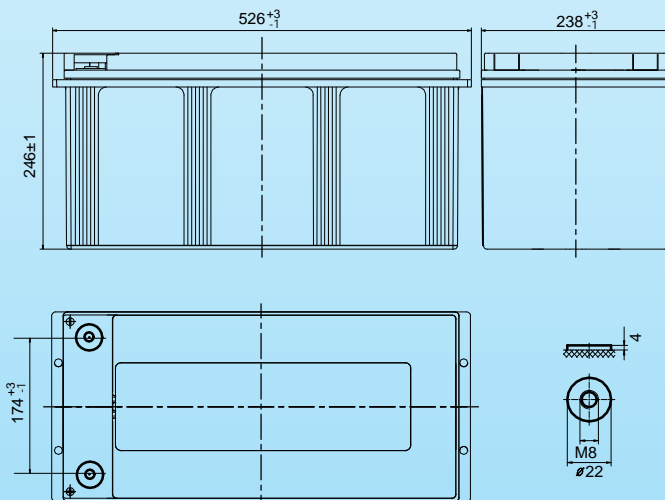
### General Features

- Positive and negative plates in lead-calcium-tin alloy;
- Superior energy density;
- Operate at a low internal pressure;
- Gas recombination;
- Special separator technology;
- A recognized component of UL, IEC, TLC. etc;
- Container Material ABS(UL 94-HB);
- Very high power output for 5 to 15 minutes supply
- A covered range from 90W to 850W per cell for 15min @ 1.67Vpc;
- Six months shelf life at 20 °C;
- Design life :12+ years at 20 °C;
- Recommended loading 1h and below;

### Dimensions and Weight

Length(mm / inch)	526/20.7
Width(mm / inch)	238/9.37
Height(mm / inch)	246/9.7
Total Height(mm / inch)	246/9.7
Approx. Weight(Kg / lbs)	69.0/152.2

\* Weight deviation: ± 5%



### Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	12 years
Nominal Capacity 77°F(25°C)	
15 min wattage @ 1.67VPC	850W/cell
10 hour rate (22.0A,10.8V )	220Ah
20 hour rate (11.5A,10.8V )	230Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤1.7 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)	1100A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	69A
Temperature compensation	-30mV/°C
Standby use	2.23-2.30VPC
Temperature compensation	-20mV/°C

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

End Voltage Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	957	777	594	460	395	346	305	224	173
1.65V	947	750	583	446	386	337	299	217	169
1.67V	943	739	576	440	382	334	296	214	167
1.70V	928	714	554	420	365	318	284	206	161
1.75V	915	694	532	400	342	302	269	196	153
1.80V	897	678	516	392	331	289	254	187	147

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

End Point Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	1654	1386	1059	860	716	613	546	399	310
1.65V	1633	1341	1034	853	702	604	534	392	303
1.67V	1624	1323	1016	850	697	601	529	389	300
1.70V	1587	1290	976	805	667	578	515	376	292
1.75V	1543	1268	946	780	645	557	486	365	284
1.80V	1516	1174	873	700	597	520	467	355	276

(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.

