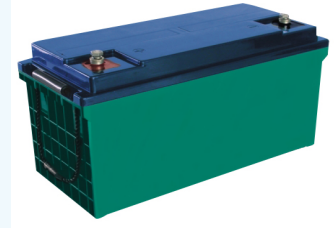


Overview

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;

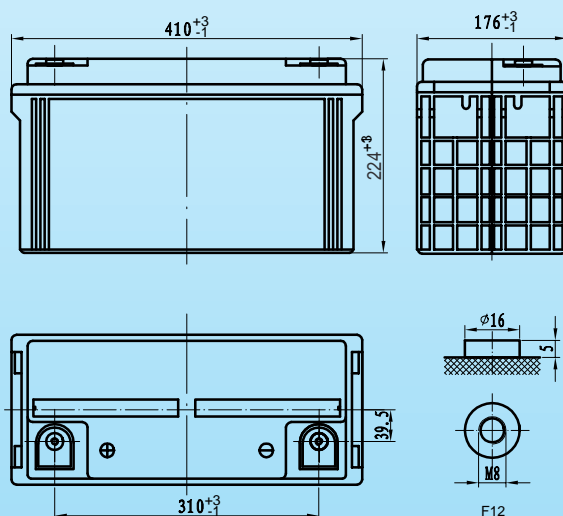
Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	12 years
Nominal Capacity 77°F(25°C)	
15 min wattage @ 1.67VPC	450W/cell
10 hour rate (12.0A,10.8V)	120Ah
20 hour rate (6.30A,10.8V)	126Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤4.0 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)	840A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	37.8A
Temperature compensation	-30mV/°C
Standby use	2.23-2.30VPC
Temperature compensation	-20mV/°C

Dimensions and Weight

Length(mm / inch)	410/16.14
Width(mm / inch)	176/6.93
Height(mm / inch)	224/8.82
Total Height(mm / inch)	224/8.82
Approx. Weight(Kg / lbs)	36.5/80.5

* Weight deviation: ± 5%



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

End Voltage Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	487	414	340	266	223	189	160	111	86.1
1.65V	471	405	318	255	211	179	151	105	81.6
1.67V	465	402	309	250	206	175	147	103	79.8
1.70V	446	384	294	244	198	168	143	99.8	77.7
1.75V	427	368	287	234	191	161	135	94.5	74.6
1.80V	406	362	282	223	183	157	131	92.4	72.5

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

End Point Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	904	764	593	475	403	341	294	203	161
1.65V	886	741	575	457	386	324	278	197	156
1.67V	879	732	568	450	379	317	271	194	154
1.70V	856	699	548	440	371	311	269	191	151
1.75V	832	667	538	424	358	301	261	185	147
1.80V	813	643	510	406	338	287	249	180	143

(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.



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

HFS12-450W-X

12V 120Ah

