



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

HFS12-540W-X

12V 140Ah

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;

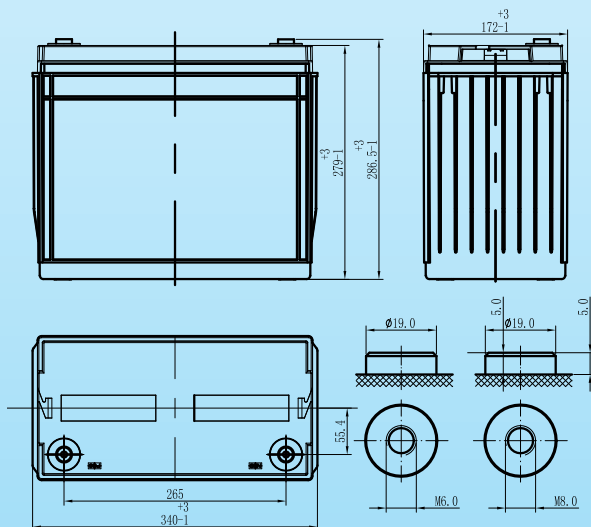
Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	12 years
Nominal Capacity 77°F(25°C)	
15 min wattage @ 1.67VPC	540W/cell
10 hour rate (14.0A,10.8V)	140Ah
20 hour rate (7.50A,10.8V)	150Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤3.6 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)	910A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	45 A
Temperature compensation	-30mV/°C
Standby use	2.23-2.30VPC
Temperature compensation	-20mV/°C

Dimensions and Weight

Length(mm / inch)	340/13.4
Width(mm / inch)	172/6.78
Height(mm / inch)	279/11.0
Total Height(mm / inch)	286.5/11.3
Approx. Weight(Kg / lbs)	41.5/91.5

* 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	568	469	358	292	253	217	196	134	103
1.65V	552	456	337	281	246	212	188	130	101
1.67V	546	450	328	276	244	210	185	128	100
1.70V	523	433	318	259	228	198	175	125	99
1.75V	509	416	302	245	215	190	169	122	96
1.80V	492	403	293	235	206	183	161	119	94

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

End Point Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60V	1104	887	680	564	468	400	358	260	201
1.65V	1078	857	662	547	459	396	350	255	198
1.67V	1067	844	655	540	456	394	347	253	197
1.70V	1035	790	601	491	427	374	331	245	192
1.75V	1004	766	568	473	412	360	323	237	188
1.80V	976	744	534	455	397	347	311	229	184

(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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