

HFS Series

HFS12-450W-X



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. Suitable for data centres, large UPS, telecom equipment and other scenarios.



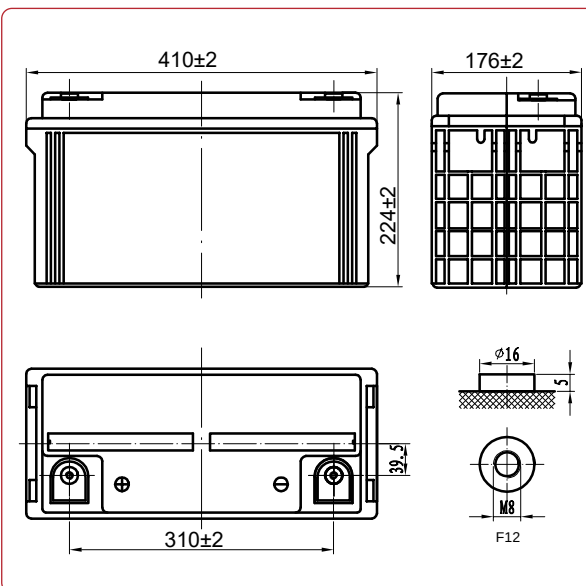
General Feature

- Sealed maintenance-free design, gas recombination efficiency up to 99%;
- Compact size, light weight, high discharge efficiency, suitable for the needs of high-precision power supply equipment;
- High tin low calcium alloy grid, high power lead paste formula, 5-15min backup power dedicated design;
- Produced by advanced automated equipment, more stable product performance;
- Low self-discharge rate, low internal resistance, strong charge acceptance ability;
- Standard and flame-retardant ABS cell covers (FR UL94-V0) available;
- Recommended for 1 hour or less backup power use, with more outstanding performance.

Standards & Certificates

- IEC 60896-21/22
- CE, UL approved
- GB/T 45001 / ISO 45001
- GB/T 24001 / ISO 14001
- GB/T 19001 / ISO 9001

Dimensions



Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	PbO ₂	Pb	ABS	ABS	EPDM	Cu	AGM	H ₂ SO ₄

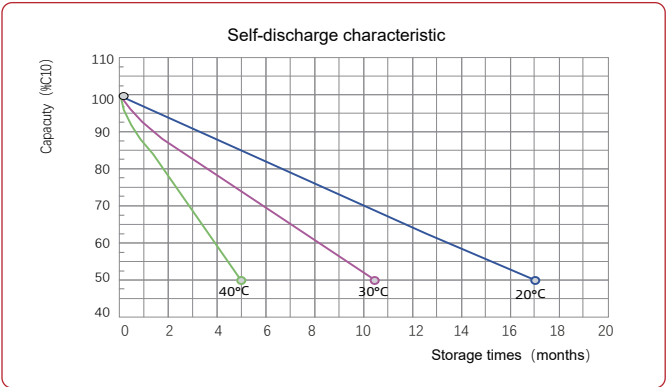
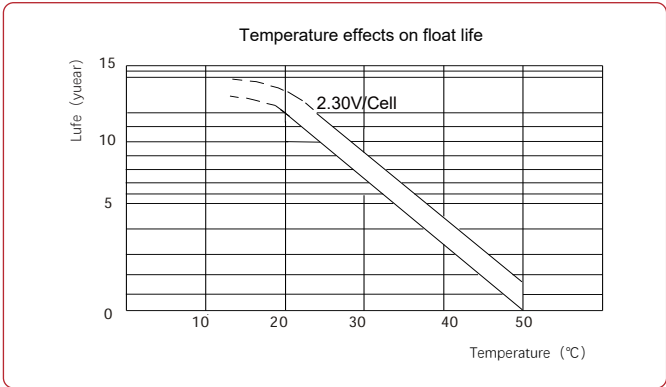
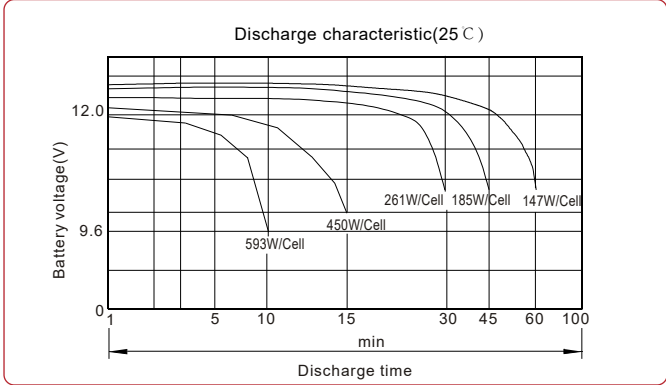
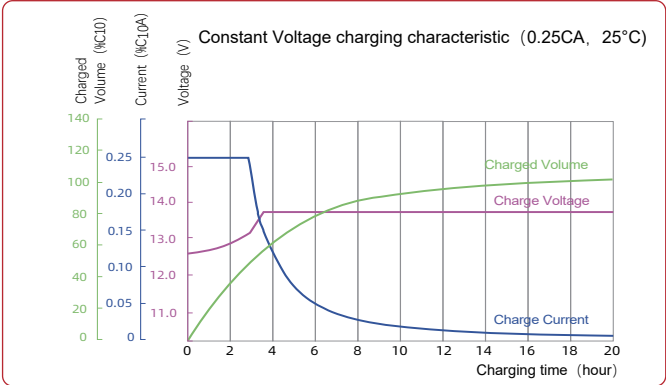
Specifications

Battery model	HFS12-450W-X
Nominal Voltage	12V
Nominal Capacity (25℃)	120Ah (10hr, 10.8V)
Nominal Power (25℃)	450W/Cell(15min.1.67VPC)
Weight	36.5±3%Kg
Internal Resistance	Fully Charged battery 77°F (25℃) : ≤4.0 mΩ
Dimensions (L*W*H*TH)	410*176*224*224mm
Short Circuit	3225A
Charging Voltage	Floating Charge: 2.23~2.28VPC, Temperature compensation: -3.3mV/℃/Cell Equalizing Charge: 2.30~2.40VPC, Temperature compensation: -5.0mV/℃/Cell
Maximum Charging Current	34.5A
Self-Discharge	3% of capacity declined per month at 20℃(average)
Operating Temperature Range	Discharge: -20 ~ 60℃; Charge: -10 ~ 60℃; Storage: -15~40℃
Design life (25℃)	12years
Terminal	M8

Constant Current Discharge Data (25°C,A)									
End Voltage Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60	487	414	340	261	223	189	160	111	86.1
1.65	471	405	318	250	211	179	151	105	81.6
1.67	465	402	309	245	206	175	147	103	79.8
1.70	446	384	294	239	198	168	143	99.8	77.7
1.75	427	368	287	229	191	161	135	94.5	74.6
1.80	406	362	282	218	183	157	131	92.4	72.5

Constant Power Discharge Data (25°C,W/Cell)									
End Voltage Volts/Cell	3min	5min	10min	15min	20min	25min	30min	45min	60min
1.60	904	764	593	475	403	341	294	203	161
1.65	886	741	575	457	386	324	278	197	156
1.67	879	732	568	450	379	317	271	194	154
1.70	856	699	548	440	371	311	269	191	151
1.75	835	667	538	424	358	301	261	185	147
1.80	825	653	510	406	338	287	249	180	143

Characteristic Curve



Cautions

- Do not attempt to disassemble, disassemble or modify by yourself;
 - Carefully short-circuit the positive and negative poles of the battery or battery pack;
 - Use appropriate wires for connecting and extracting the battery pack;
 - When connecting, make sure to cut off the power supply and firmly connect the terminal bolts;
 - Do not use the battery directly as an alternating current power source;
- Do not contaminate with oil, water or other chemical solvents and chemicals;
 - During the handling process, handle the battery with care, avoid rolling or dropping it;
 - It should be stored or installed in a dry and ventilated place, away from heat sources and avoid direct sunlight;
 - Connect the battery to a matching power supply and set the charging voltage, current and other parameters as required;



DISCLAIMER: This information is only a brief description of the performance of the product and does not imply a warranty for any of the batteries. The relevant parameters of the battery can be modified independently without notice, please keep in touch with Vision to get the latest information. The final interpretation right belongs to Shenzhen Center Power Tech.Co.Ltd.,