



VISION Rechargeable Products
Sealed Lead Acid Battery

www.vision-batt.com

HP&HF Series

High Rate Discharge

The new VISION HP/HF series batteries are specially designed for applications where need high power output. By optimum design of battery grids and platepaste formula, the HP/HF series can deliver up to 40% more power than VISION standard CP/FM series.

Shenzhen Center power tech co., ltd has more than 15 year's experience in the manufacturing of VRLA batteries. SZCPT is one of the biggest manufacturers of SLA (or VRLA) batteries in the world, the biggest one in Mainland China and the first in China to develop and commercialize the sealed lead-acid battery with brand name VISION and has been at the forefront of battery technology from day one.

SZCPT leads the world in innovative battery technology. Our global network of sales and service engineers, backed in turn by our agents and distributors, means that we are currently active in more than 100 countries.

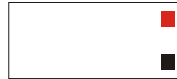
Shenzhen Center Power Tech. Co., Ltd

HF12-725W-X 12V 170Ah

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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 890W per cell for 10' @ 1.60Vpc
- Six months shelf life at 20°C
- Design life 10 years



Dimensions and Weight

	SI Units	English Units
Length	530mm	20.9inch
Width	209mm	8.23inch
Height	215mm	8.46inch
Total Height	220mm	8.66inch
Approx. Weight	55.7Kg	122.8lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 68°F(20°C)
 - 10 min wattage @ 1.6V 725W/cell
 - 20 hour rate (9.0A, 10.5V) 180Ah
- Nominal Capacity 77°F(25°C)
 - 10 hour rate (17.0A, 10.8V) 170Ah
- Internal Resistance
 - Fully Charged battery 68°F(20°C) 2.6mOhms
- 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 68°F(20°C) 1100A(5s)
- Charge Methods: Constant Voltage Charge 68°F(20°C)
 - Cycle use 14.5-14.7V
 - Maximum charging current 51A
 - Temperature compensation -30mV/°C
- Standby use 13.6-13.8V
 - Temperature compensation -20mV/°C



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Discharge Data

Constant Current Discharge Data (Amperes at 20°C)

End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60		400	329	271	237	213	191	174	161	147	136	127	88.0	68.4	56.7	48.9	39.2	33.3	28.4	24.8	22.2	20.1	18.5	16.0	8.24
1.65		380	315	260	227	205	185	169	157	143	132	122	85.1	66.4	55.2	47.7	38.0	32.2	27.5	24.1	21.6	19.6	18.0	15.6	8.04
1.70		360	300	248	217	197	178	164	153	139	127	118	82.2	64.4	53.7	46.6	36.9	31.1	26.6	23.4	21.0	19.1	17.5	15.2	7.83
1.75		339	284	236	208	189	171	158	147	134	122	113	79.3	62.3	52.1	45.4	35.8	30.0	25.7	22.6	20.3	18.5	16.9	14.8	7.59
1.80		317	269	224	197	179	163	150	141	128	117	109	76.3	60.2	50.5	44.1	34.5	28.7	24.6	21.7	19.5	17.8	16.4	14.3	7.34

Constant Power Discharge Data (Watts per cell at 20°C)

End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60		725	590	490	430	390	345	311	285	261	242	225	161	129	109	96.6	77.2	65.5	55.4	48.2	42.7	38.5	35.1	30.5	15.7
1.65		704	569	474	416	378	335	302	277	254	235	220	157	126	107	94.8	75.6	64.0	54.1	47.0	41.7	37.6	34.3	29.7	15.3
1.70		684	548	457	402	365	324	293	269	247	228	213	153	122	104	92.0	73.6	62.6	52.8	45.9	40.7	36.6	33.4	28.9	14.9
1.75		660	527	440	387	352	313	283	260	239	222	207	149	119	102	90.2	72.0	61.1	51.5	44.7	39.5	35.5	32.3	28.0	14.4
1.80		624	506	423	373	339	302	273	251	231	214	210	144	116	98.6	87.3	69.9	59.5	50.1	43.4	38.3	34.4	31.3	27.1	13.9

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

Performance drawings

