VISION

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 plate paste 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

HF12-810W-X 12V 185Ah

(Edition Nov 2006)

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	522mm	20.6inch
Width	238mm	9.37inch
Height	218mm	8.58inch
Total Height	223mm	8.78inch
Approx. Weight	66.0Kg	145.5lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 68°F(20°C)
  - 10 min wattage @1.6V 810W/cell
  - 20 hour rate (9.8A, 10.5V) 196Ah
- Nominal Capacity 77°F(25°C)
  - 10 hour rate (18.5A, 10.8V) 185Ah
- Internal Resistance
  - Fully Charged battery 68°F(20°C) 2.4mOhms
- 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) 1200A(5s)
- Charge Methods: Constant Voltage Charge 68°F(20°C)
  - Cycle use 14.5-14.7V
  - Maximum charging current 55A
  - Temperature compensation -30mV/°C
- Standby use 13.6-13.8V
  - Temperature compensation -20mV/°C

ISO9001:2000 | 1298-2004-AE-RGC-RvA | MH25860 | G4M19906-9202-E-16

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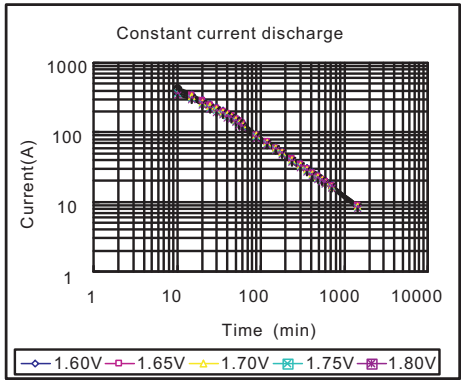
Discharge Data

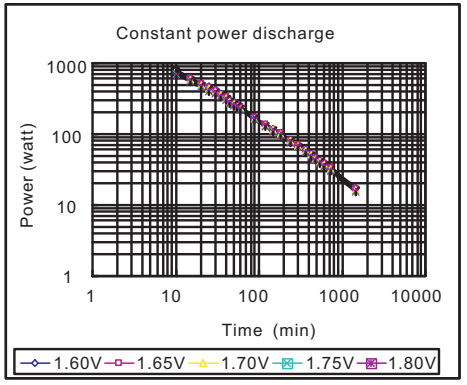
Constant Current Discharge Data (Amperes at 20°C)																								
End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	60min	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60		435	358	295	257	232	208	189	175	160	148	138	95.6	74.4	61.7	53.2	42.6	36.2	30.8	27	24.1	21.9	20.1	17.4	8.96
1.65		413	342	283	247	223	201	184	171	156	143	133	92.5	72.2	60.0	51.9	41.3	35.0	29.9	26.2	23.5	21.3	19.6	17.0	8.74
1.70		391	326	270	236	214	193	178	166	151	138	128	89.3	70.0	58.3	50.6	40.1	33.8	28.9	25.4	22.8	20.7	19.1	16.6	8.52
1.75		368	309	257	226	205	186	171	160	145	133	123	86.2	77.6	56.7	49.3	38.9	32.6	27.9	24.5	22.0	20.1	18.4	16.0	8.25
1.80		345	292	244	214	195	177	164	153	139	128	118	83.0	76.0	54.9	47.9	37.5	31.2	26.8	23.6	21.2	19.4	17.9	15.5	7.98

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		810	641	533	467	424	375	339	310	284	263	245	175	140	119	105	83.9	71.2	60.5	52.9	47.2	42.8	39.2	34.0	17.5
1.65		772	619	515	453	411	364	329	301	276	256	239	171	137	117	103	82.1	69.6	59.1	51.7	46.1	41.7	38.2	33.1	17.0
1.70		733	596	497	437	397	352	318	292	268	248	232	167	134	114	100	80.0	68.0	57.7	50.4	44.9	40.7	37.2	32.3	16.6
1.75		694	573	478	421	383	340	308	283	260	241	225	162	130	111	98.0	78.3	66.4	56.3	49.1	43.7	39.4	36.1	31.3	16.1
1.80		655	550	460	405	369	328	297	273	251	233	218	157	126	107	94.9	76.0	64.7	54.8	47.7	42.4	38.2	34.9	30.3	15.6

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

Performance drawings





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