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

HF12-1010W-X 12V 210Ah

(Edition June 2004)

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 1010W 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	67.0Kg	148lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 68°F(20°C)
  - 10 min wattage @1.6V 1010W/cell
  - 20 hour rate (11A, 10.5V) 220Ah
- Nominal Capacity 77°F(25°C)
  - 10 hour rate (21A, 10.8V) 210Ah
- Internal Resistance
  - Fully Charged battery 68°F(20°C) 2.1mOhms
- 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) 1350A(5s)
- Charge Methods: Constant Voltage Charge 68°F(20°C)
  - Cycle use 14.5-14.7V
  - Maximum charging current 63A
  - 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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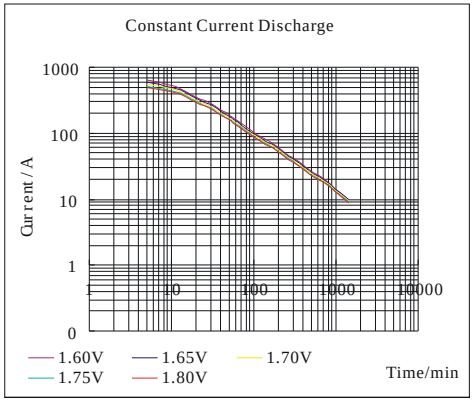
Discharge Data

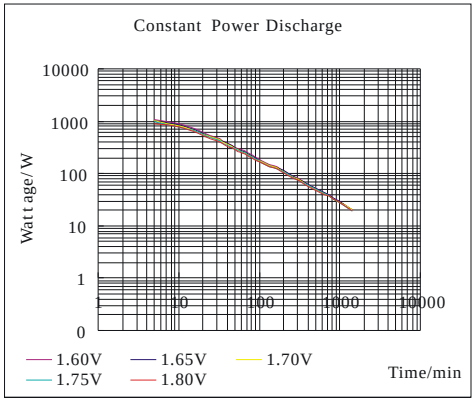
Constant current Discharge Data (Amperes at 25℃)																								
End Voltage Volts/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.6	565	447	370	320	289	255	231	211	191	176	163	115	91.0	76.1	66.5	51.9	43.0	36.5	32.0	28.6	25.8	23.4	20.1	10.2
1.65	539	428	354	306	277	244	221	202	184	169	157	110	87.6	73.3	64.1	50.1	41.6	35.3	31.0	27.7	25.1	22.8	19.5	9.90
1.7	514	409	338	293	266	234	212	194	176	162	151	106	84.3	70.6	61.8	48.4	40.1	34.0	30.0	26.8	24.4	22.2	18.9	9.60
1.75	488	390	321	279	254	223	202	185	169	155	144	102	80.9	67.8	59.4	46.6	38.7	32.8	29.0	25.9	23.7	21.6	18.3	9.30
1.8	463	371	305	265	242	212	192	176	161	148	138	97.5	77.5	65.0	57.0	44.8	37.3	31.5	28.0	25.0	23.0	21.0	17.7	9.00

Constant Power Discharhe Data (Watts per cell at 25℃)																								
End Voltage Volts/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.6	1010	806	650	560	509	455	405	375	342	315	290	210	168	144	128	100	83.1	70.8	62.4	55.5	50.5	46.4	40.4	21.0
1.65	965	775	625	542	494	441	394	365	333	307	283	205	164	141	125	97.8	81.4	69.3	61.1	54.4	49.6	45.5	39.7	20.7
1.7	920	743	600	525	480	428	383	355	324	298	275	199	161	137	122	95.5	79.7	67.7	59.7	53.3	48.7	44.6	39.0	20.4
1.75	875	712	575	507	465	414	371	345	314	290	268	194	157	134	118	93.3	78.0	66.2	58.4	52.1	47.7	43.7	38.2	20.0
1.8	830	680	550	489	450	400	360	335	305	281	260	188	153	130	115	91.0	76.3	64.6	57.0	51.0	46.8	42.8	37.5	19.7

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

Performance drawings





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