

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Energy Storage Battery-Tubular GEL Technology-OPzV Series

OPzV300E

(2V 300Ah)

GENERAL FEATURES

- ◆ 20 years design life at floating condition
- ◆ Wide operating temperature range from -40°C to +60°C
- ◆ Tubular positive plate with prolonged cycle life
- ◆ Fumed silica gel electrolyte
- ◆ lead-calcium grid significantly improves the corrosion resistance ability
- ◆ Low self-discharge rate and long shelf life
- ◆ Excellent deep discharge recovery capability



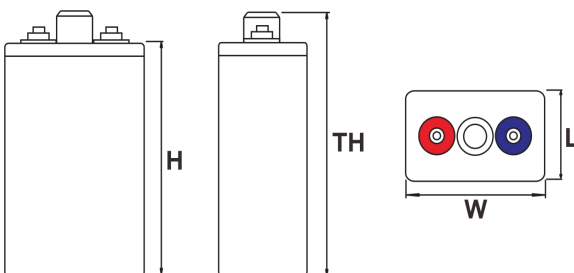
Application

- ◆ Renewable energy system
- ◆ Hybrid solar power system
- ◆ Uninterrupted Power Supply (UPS)
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security systems
- ◆ Control equipment, and other factory automation equipment
- ◆ Emergency power supply (EPS)
- ◆ Lighting equipment

Dimension

Unit:mm

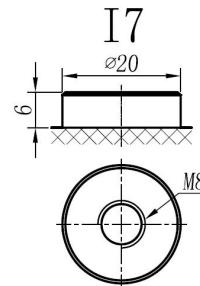
Length	145±2mm / 5.71inch
Width	206±2mm / 8.11inch
Container Height	356±3mm / 14.02inch
Total Height	389±3mm / 15.31inch



Terminal

Unit:mm

Terminal Type: I7



Weight

25.4kg 56lbs



This document is subject to change without prior notification

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Specification

Nominal Voltage	2V	
Rated Capacity(25°C)	318Ah	20hr Rate(1.80V/cell)
	300Ah	10hr Rate(1.80V/cell)
	262Ah	5hr Rate(1.75V/cell)
	235Ah	3hr Rate(1.70V/cell)
	179Ah	1hr Rate(1.60V/cell)
Container Material	ABS (Fire-proofing ABS container available)	
Operating Temperature Range	Discharge	-40 ~ +60°C
	Charge	0 ~ +40°C
	Storage	-20 ~ +40°C
Capacity Effected by Temperature	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-20°C / -4°F	60%
Charge Voltage	Float Voltage	2.23V/cell@25°C, Compensation Factor: -3mV/cell/°C
	Equalize Voltage	2.35 -2.40V/cell@25°C, Compensation Factor: -3mV/cell/°C
	Cycle Voltage	2.40 -2.50V/cell@25°C, Compensation Factor: -5mV/cell°C
Max Charging Current	60A (0.2C)	
Max. Discharge Current (5S)	1800A	
Internal Resistance	0.6mΩ	
Self Discharge	<3%, OPZV series stored at 25 °C require a supplementary charge every six months, the charging interval would shrink when the ambient temperature went higher	

Discharge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A

F.V/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	215	172	136	93.5	71.3	49.2	35.1	29.0	15.3
1.80V/cell	239	190	149	99.0	74.8	51.0	36.5	30.0	15.9
1.75V/cell	255	202	157	104	76.6	52.4	37.3	30.8	16.3
1.70V/cell	270	214	165	107	78.3	53.6	37.8	31.2	16.5
1.65V/cell	285	226	172	110	79.7	54.5	38.4	31.5	16.7
1.60V/cell	301	233	179	112	80.4	55.0	38.8	31.8	16.7

Constant Power Discharge Table (25°C/77°F) Unit: W

F.V/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	404	327	260	180	138	95.9	68.8	57.1	30.4
1.80V/cell	439	353	282	190	144	98.7	70.9	58.5	31.2
1.75V/cell	462	371	294	197	147	101	72.2	59.7	31.8
1.70V/cell	482	388	307	202	149	103	72.8	60.2	32.2
1.65V/cell	499	404	317	207	151	104	73.7	60.6	32.3
1.60V/cell	518	410	328	208	152	105	74.2	61.0	32.4



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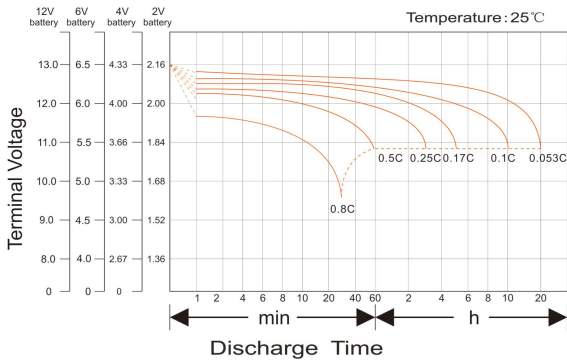


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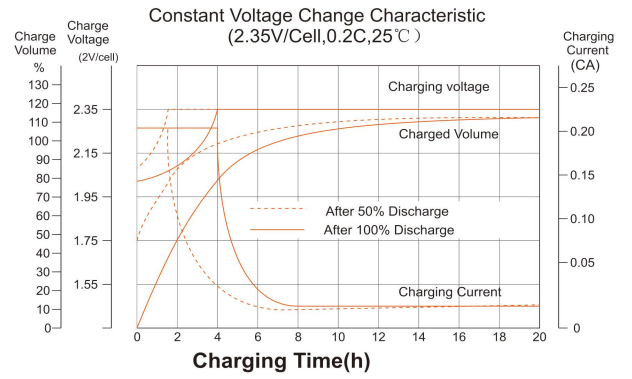


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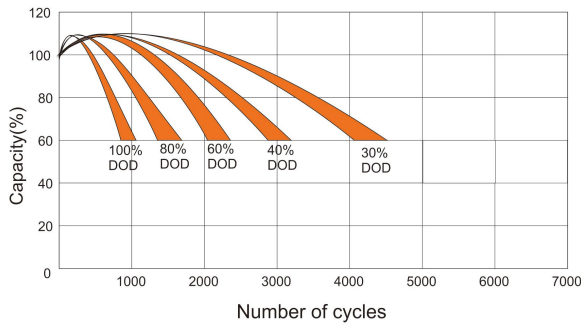
Discharge Characteristics Curve



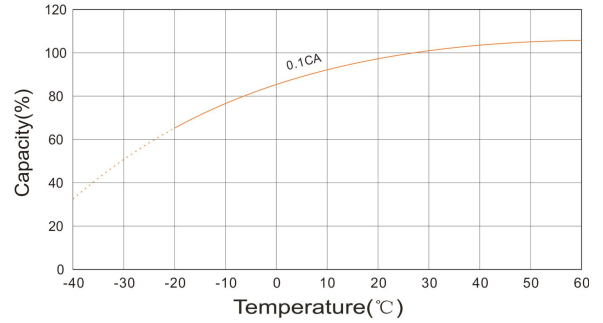
Charging Characteristics Curve



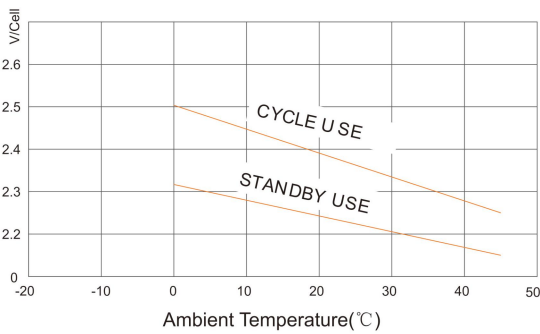
Cycle life in relation to depth of Discharge



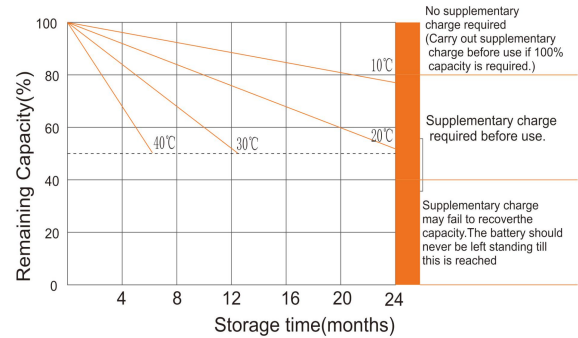
Temperature effects on Capacity



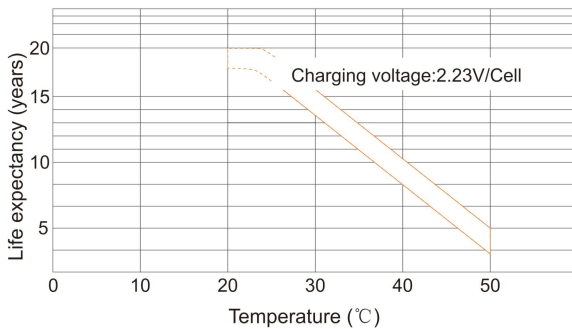
Relationship between charging voltage and temperature



Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use

