☐ Motive Battery ■ Energy Storage Battery

☐ Reserve Battery ☐ Motorcycle Battery

TN POWER

Energy Storage Battery-Tubular GEL Technology-OPzV Series

OPzV600E

(2V 600Ah)

GENERAL FEATURES

- 20 years design life at floating condition
- Wide operating temperature range from -40℃ to +60℃
- 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

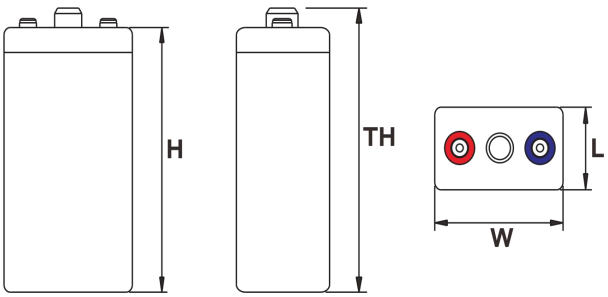
Application

- 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

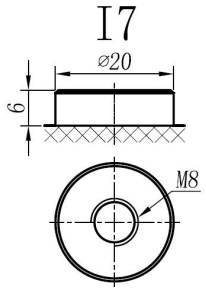
Length	145±2mm	/	5.71inch
Width	206±2mm	/	8.11inch
Container Height	646±3mm	/	25.43inch
Total Height	678±3mm	/	26.69inch



Terminal

Unit:mm

Terminal Type: I7



Weight

45.5kg 100.31lbs

ISO9001 ISO14001 OHSAS18001

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Specificaion

Nominal Voltage		2V	
Rated Capacity(25°C)		636Ah	20hr Rate(1.80V/cell)
		600Ah	10hr Rate(1.80V/cell)
		524Ah	5hr Rate(1.75V/cell)
		470Ah	3hr Rate(1.70V/cell)
		359Ah	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/℃	
	Equalize Voltage	2.35 -2.40V/cell@25°C, Compensation Factor： -3mV/cell/℃	
	Cycle Voltage	2.40 -2.50V/cell@25°C, Compensation Factor： -5mV/cell℃	
Max Charging Current		120A (0.2C)	
Max. Discharge Current (5S)		3600A	
Internal Resistance		0.42mΩ	
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	430	344	272	187	143	98.4	70.2	58.1	30.7
1.80V/cell	478	380	299	198	150	102	73.0	60.0	31.8
1.75V/cell	510	405	315	208	153	105	74.6	61.5	32.5
1.70V/cell	541	428	331	214	157	107	75.6	62.3	33.1
1.65V/cell	570	451	344	220	159	109	76.8	62.9	33.3
1.60V/cell	601	465	359	223	161	110	77.5	63.6	33.5

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	809	654	521	361	277	192	138	114	60.7
1.80V/cell	879	706	564	379	288	197	142	117	62.4
1.75V/cell	924	742	588	395	293	202	144	119	63.5
1.70V/cell	964	776	614	404	298	205	146	120	64.4
1.65V/cell	999	808	634	413	302	208	147	121	64.6
1.60V/cell	1037	820	655	417	304	209	148	122	64.7

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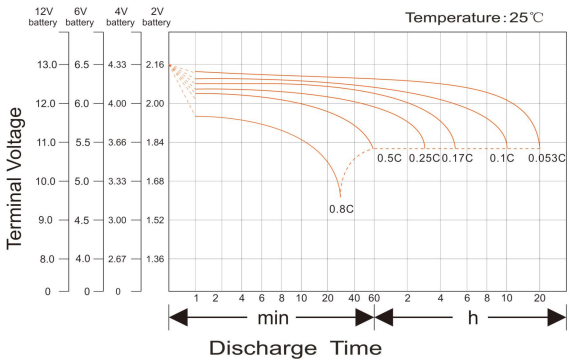
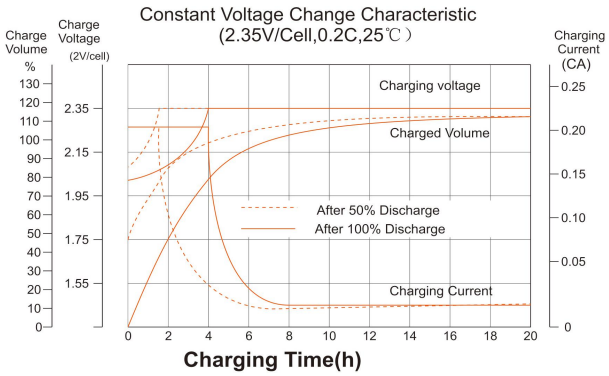
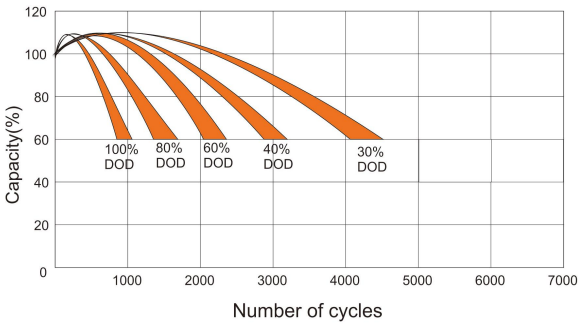
Discharge Characteristics Curve



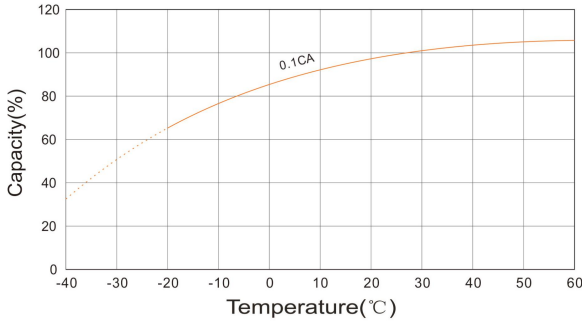
Charging Characteristics Curve



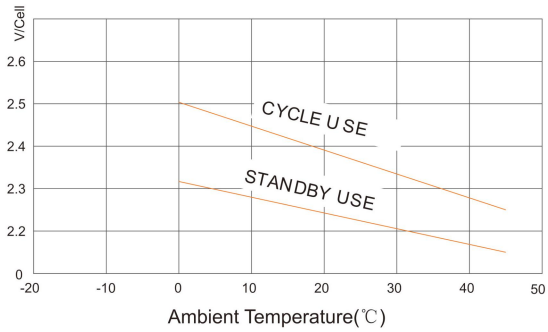
Cycle life in relation to depth of Discharge



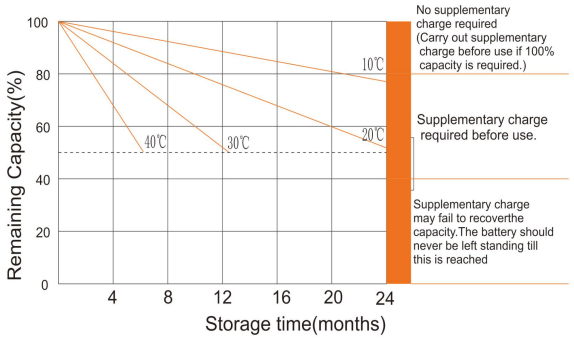
Temperature effects on Capacity



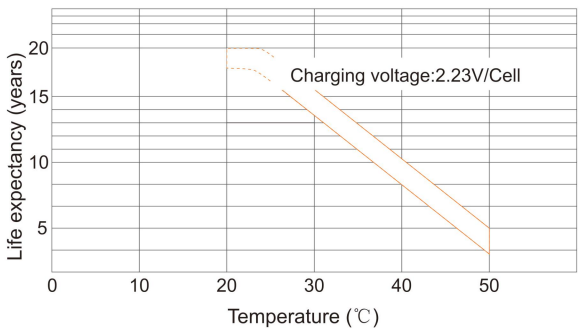
Relationship between charging voltage and temperature



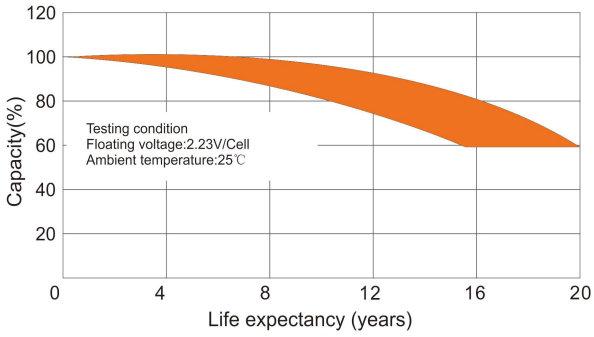
Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use



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