

Tubular Gel Battery

4 OPzV200 (2V200AH)

Specification

Nominal Voltage	2V	
Capacity	200.0Ah@10hr to 1.80V/cell	
Dimension	Length	103±2mm (4.06 inches)
	Width	206±3mm (8.11 inches)
	Container Height	355±3mm (14.0 inches)
	Total Height (with Terminal)	390±3mm (15.3 inches)
Approx Weight	Approx 18.0 kg (39.7lbs)	
Container Material	ABS	
Rated Capacity	300 AH/30.0A	(10hr, 1.80V/cell, 20°C/68°F)
	263 AH/52.6A	(5hr, 1.75V/cell, 20°C/68°F)
	233.7 AH/77.9A	(3hr, 1.75V/cell, 20°C/68°F)
	171 AH/171A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	1600A (5s)	
Internal Resistance	Approx 1.2mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Cycle Use	Initial Charging Current less than 50.0A. Voltage 2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C	
	No limit on Initial Charging Current Voltage 2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Standby Use	2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C	
Self-discharge	<2% pre month @ 20°C(68°F)	



Applications

- ◆ Solar energy, wind energy
- ◆ Electric power, nuclear power
- ◆ Communication
- ◆ Ship, maritime affairs
- ◆ UPS, medical facilities and emergency lighting
- ◆ Situation with high environmental protection and energy-saving
- ◆ Better safety performance and reliability
- ◆ Designed service life of 20 years

Main Technical Advantages

- ◆ Plate: positive plate adopts tubular plate which can prevent active material falling, and adopts multi-component alloy frame. have fine corrosion-resisting performance and long service life. Negative plate adopts special radiated structure.
- ◆ Separator: adopt special micro-pore PVC-SiO₂ separator from Europe AMER-SIL Company, separator have big porosity and low resistance.
- ◆ Electrolyte: adopts Germany gas silicon dioxide, electrolyte in gel state in the battery without flowing, leakage and lamination can be avoided.
- ◆ Safety valve: adopt Germany technology, constant opening and closing, accumulator case expansion, damage and electrolyte dry up can be avoided.

Constant Current Discharge (Amperes) at 20 °C (68°F)

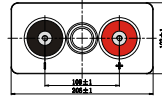
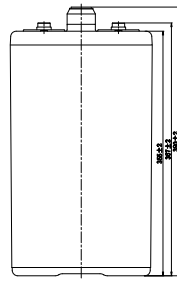
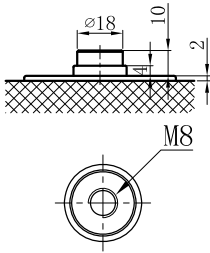
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	171.0	155.0	122.0	89.7	60.8	46.7	31.9	22.2	18.7
1.80V/cell	210.0	188.0	142.0	101.0	66.8	50.8	34.4	23.8	20.0
1.75V/cell	248.0	210.0	152.0	105.0	68.6	51.9	35.1	24.2	20.3
1.70V/cell	279.0	230.0	161.0	109.0	70.4	53.0	35.6	24.5	20.5
1.65V/cell	299.0	242.0	167.0	112.0	71.9	54.0	36.2	24.8	20.8
1.60V/cell	313.0	251.0	171.0	114.0	72.8	54.6	36.5	25.0	20.9

Constant Power Discharge (Watts) at 20 °C (68°F)

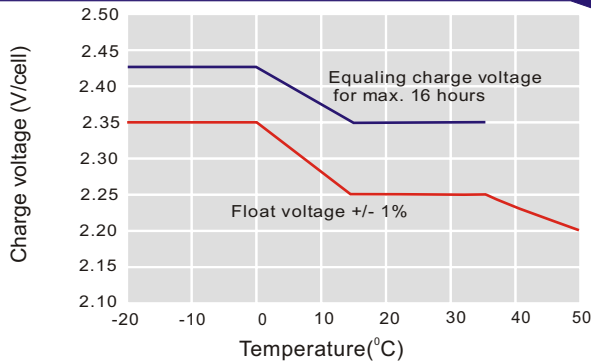
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	318	292	233	174	118	91.2	62.7	44.1	37.3
1.80V/cell	384	348	269	194	129	98.8	67.4	47.1	39.7
1.75V/cell	446	384	284	201	132	101	68.5	47.8	40.3
1.70V/cell	492	413	298	207	135	102	69.3	48.3	40.7
1.65V/cell	519	430	307	212	137	104	70.1	48.7	41.0
1.60V/cell	532	439	311	214	138	104	70.6	49.0	41.3

Dimensions

T11 Terminal

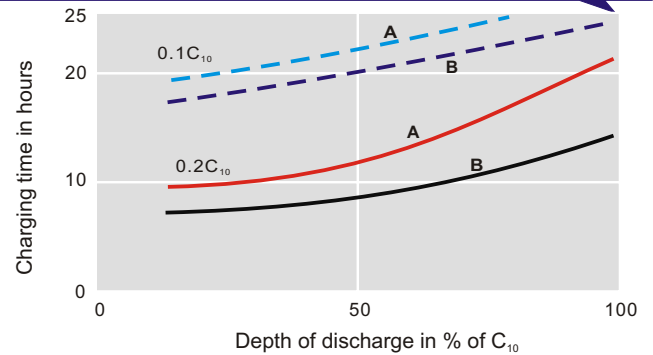


Discharge Characteristics



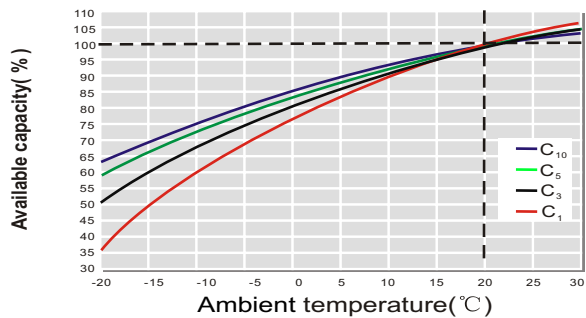
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

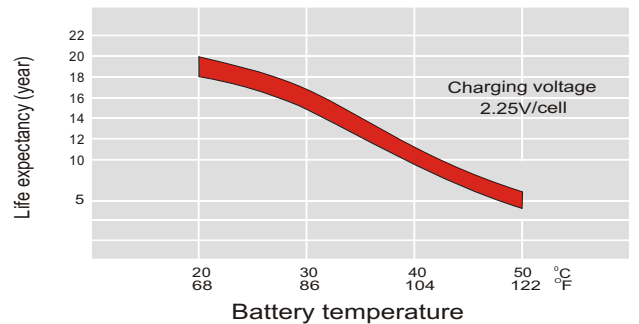


Charge voltage:
 A—2.25 V/cell B—2.40 V/cell
 - - - State of charge 100 % - - - State of charge 90 %

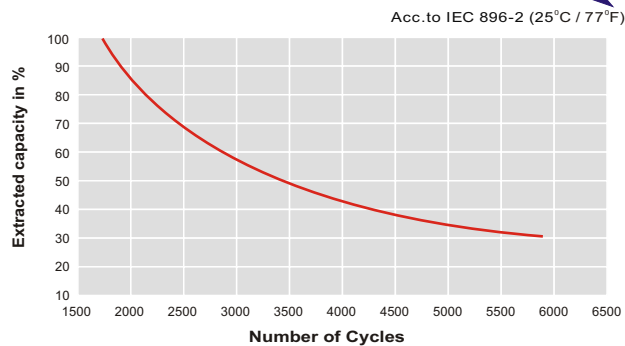
Temperature Effects in Relation to Battery Capacity



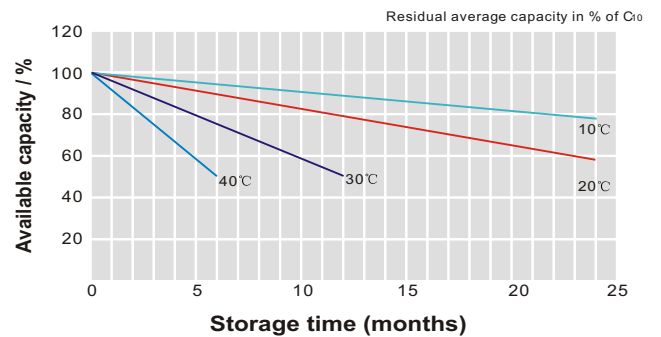
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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