

Tubular Gel Battery

8 OPzV800 (2V800AH)



Specification	
Nominal Voltage	2V
Capacity	800.0Ah@10hr to 1.80V/cell
Dimension	Length 191±2mm (7.52 inches)
	Width 210±3mm (8.27 inches)
	Container Height 646±3mm (25.4 inches)
	Total Height (with Terminal) 681±3mm (26.8 inches)
Approx Weight	Approx 64.5 kg (142.2lbs)
Container Material	ABS
Rated Capacity	800 AH/80.0A (10hr, 1.80V/cell, 20°C/68°F)
	690 AH/138A (5hr, 1.75V/cell, 20°C/68°F)
	609 AH/203A (3hr, 1.75V/cell, 20°C/68°F)
	454 AH/454A (1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	6400A (5s)
Internal Resistance	Approx 0.5mΩ
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 200.0A. 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	
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	545	518	446	356	236	183	126	87.8	74.9
1.80V/cell	671	627	520	401	259	199	135	94.0	80.0
1.75V/cell	794	702	554	418	267	203	138	95.6	81.3
1.70V/cell	891	766	587	434	273	207	140	96.8	82.2
1.65V/cell	956	809	610	446	279	211	142	98.0	83.0
1.60V/cell	1001	838	626	454	283	214	144	98.8	83.6

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

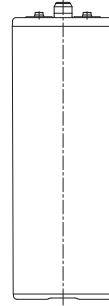
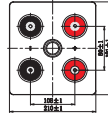
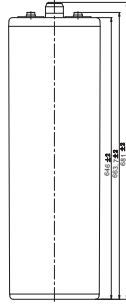
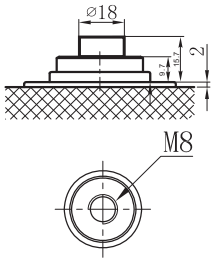
F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1014	973	853	689	459	357	247	174	149
1.80V/cell	1226	1162	984	771	502	387	265	186	159
1.75V/cell	1425	1282	1038	798	513	394	270	189	161
1.70V/cell	1571	1379	1088	823	524	400	273	191	163
1.65V/cell	1657	1435	1120	841	532	406	276	193	164
1.60V/cell	1701	1464	1137	850	536	409	278	193	165

Specifications subject to change without notice.

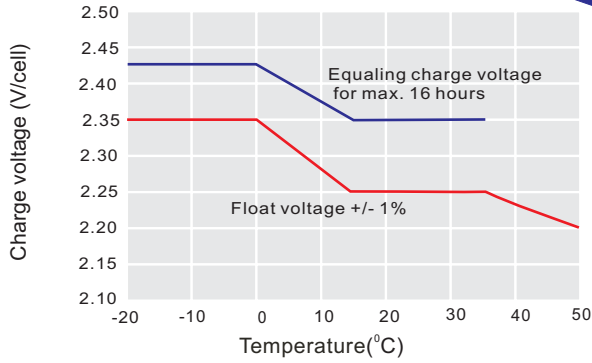


Dimensions

Terminal

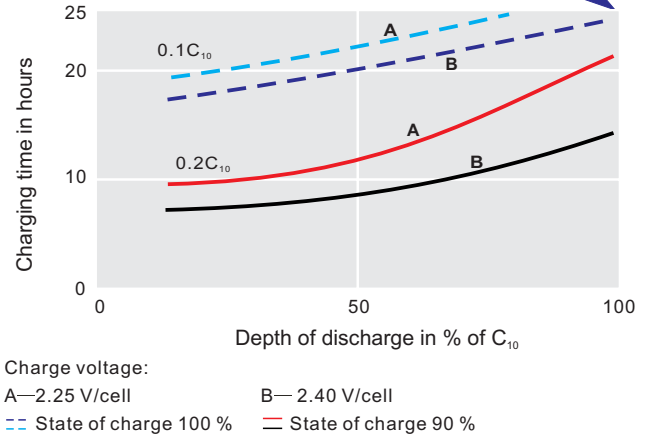


Temperature Effects in Relation to Charge Voltage



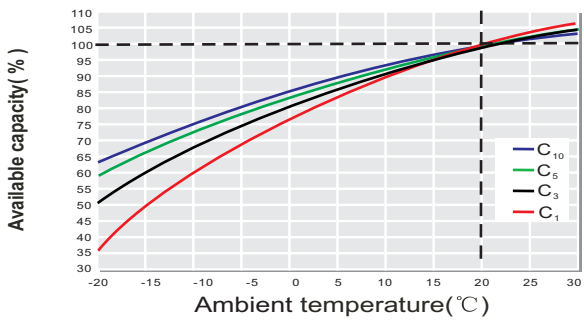
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for a continuously different battery ambient temperature.

Charging Characteristics

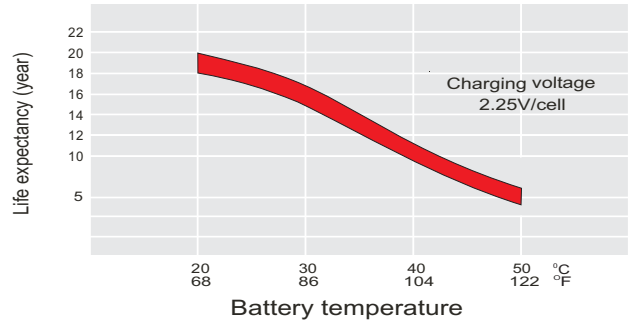


Charge voltage:
 A—2.25 V/cell B—2.40 V/cell
 - - - State of charge 100 % - - - State of charge 90 %

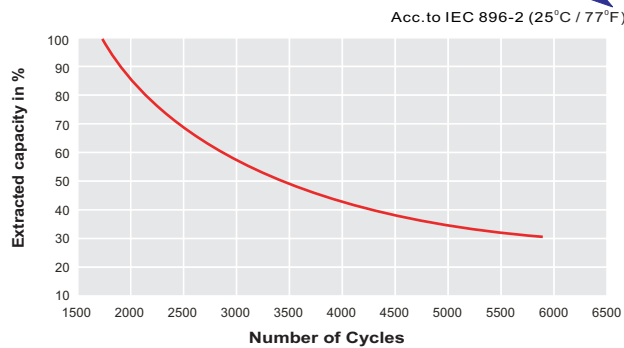
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time

