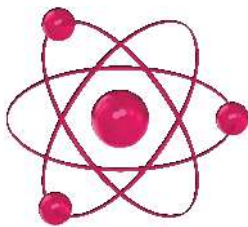


FUSION GEL BATTERIES



Tubular Gel OPzV Battery

10 OPzV1000

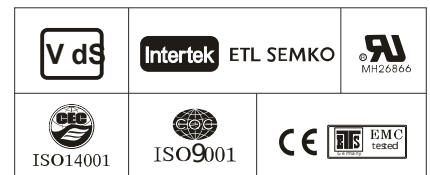


Specifications

Nominal Voltage	2V	
Nominal Capacity (100HR)	1260.0Ah @100hr to 1.80V/cell	
Dimensions	Length	233 +/-2mm (9.17 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 78.5 kg (173.1lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	1260.0AH/12.6A	(100hr ,1.80V/cell, 20°C/68°F)
	1000.0AH/100.0A	(10hr ,1.80V/cell, 20°C/68°F)
	865AH/173A	(5hr,1.75V/cell, 20°C/68°F)
	762AH/254A	(3hr,1.75V/cell, 20°C/68°F)
	568AH/568A	(1hr,1.60V/cell, 20°C/68°F)
Max. Discharge Current	8000A (5s)	
Internal Resistance	Approx 0.45mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25° +/-3°C (77° +/-5°F)	
Cycle Use	Initial Charging current less than 250.0A. 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	
Capacity Affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	OPzV Series batteries may be stored for up to 6 months at 20°C (68°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- ◆ Solar Energy, Wind Energy
- ◆ Electric Power, Nuclear Power
- ◆ Communication
- ◆ Ship, Maritime Affairs
- ◆ Boats
- ◆ 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



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

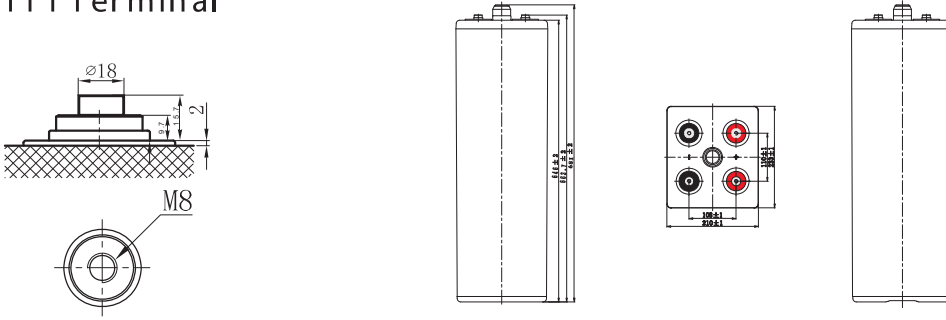
F.V/Time	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.85V/cell	682	648	558	445	295	228	157	110	93.7
1.80V/cell	839	784	650	502	324	249	169	118	100
1.75V/cell	992	877	693	522	333	254	173	119	102
1.70V/cell	1113	957	733	542	342	259	175	121	103
1.65V/cell	1196	1011	763	558	349	264	178	122	104
1.60V/cell	1251	1047	782	568	354	267	180	123	105

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

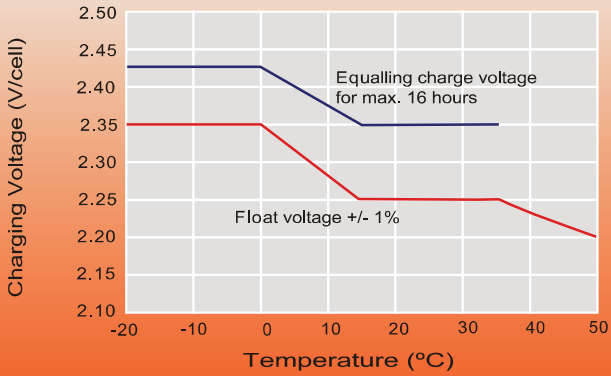
F.V/Time	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.85V/cell	1268	1217	1066	862	574	446	309	217	186
1.80V/cell	1532	1452	1230	964	627	483	332	232	199
1.75V/cell	1782	1603	1298	997	641	492	337	236	201
1.70V/cell	1964	1724	1368	1029	654	500	341	238	203
1.65V/cell	2071	1793	1400	1051	665	507	345	241	205
1.60V/cell	2126	1830	1421	1062	670	511	347	242	206

Dimensions

T11 Terminal

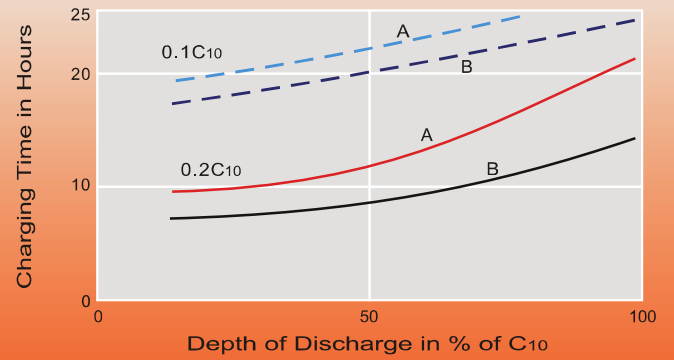


Discharge Characteristics



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

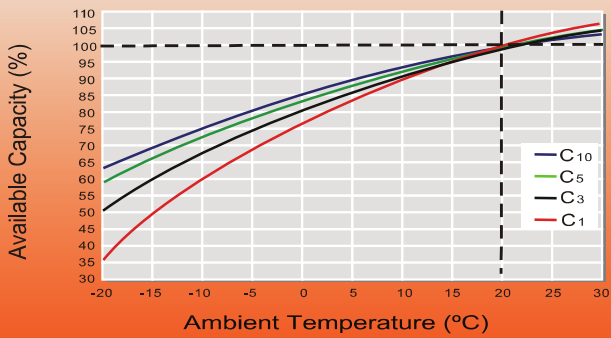
Charging Characteristics



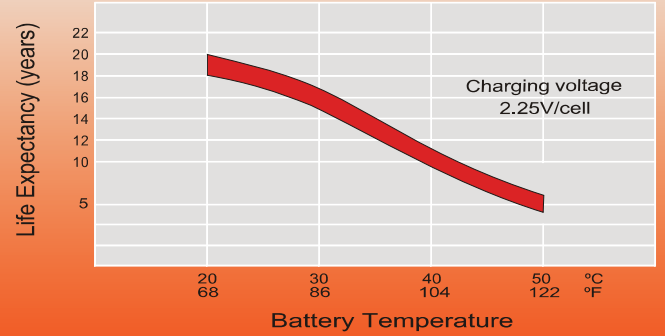
Charge voltage:

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

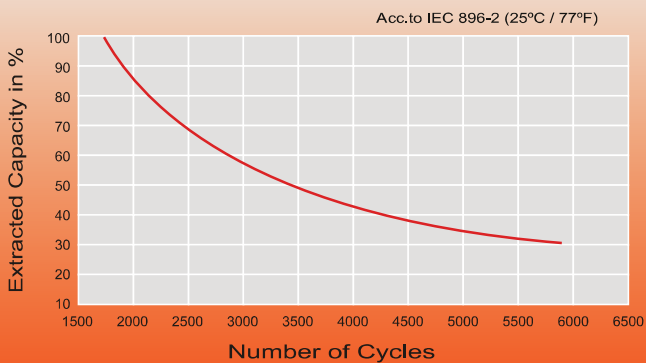
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS Storage Time

