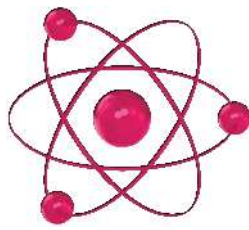


# FUSION GEL BATTERIES



## Tubular Gel OPzV Series

### 8OPzV800



#### Specifications

Nominal Voltage	2V	
Nominal Capacity (100HR)	1008.0AH @ 100Hr to 1.80V/cell	
Dimensions	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)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	1008AH/10.08A	(100hr, 1.80V/cell, 20°C/68°F)
	800AH/80.0A	(10hr, 1.80V/cell, 20°C/68°F)
	690AH/138A	(5hr, 1.75V/cell, 20°C/68°F)
	609AH/203A	(3hr, 1.75V/cell, 20°C/68°F)
	454AH/454A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	6400 (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)
Nominal Operating Temp. Range	25° +/-3°C (77° +/-5°F)	
Cycle Use	Initial Charging current less than 200.0A. Voltage 2.4V~2.5V at 20°C (68°F) Temp Coefficient -5mV/°C	
	No limit on Initial Charging Current. Voltage 2.25V~2.3V 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	<2% per month at 20°C (68°F)	

#### Applications

- ◆ Solar Farm Applications
- ◆ Communication Systems
- ◆ Green Energy Systems
- ◆ Wind Power Stations
- ◆ Telecommunications
- ◆ Interruptible Power Supply (UPS)
- ◆ Emergency Lighting Systems
- ◆ Power Stations
- ◆ Electric Power Systems (EPS)
- ◆ Railway Signaling
- ◆ Communication Power Supply
- ◆ Emergency Backup Power Supply



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

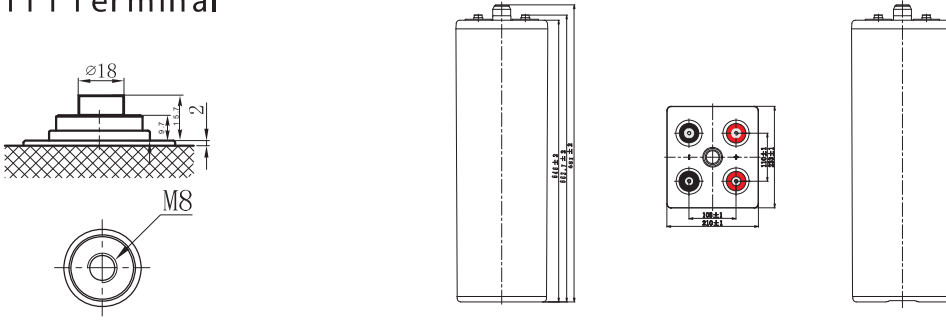
F.V/Tim e	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.85V/cell	545	518	446	356	236	183	126	87.8	74.9
1.80V/cell	671	627	520	401	259	199	135	94.0	80.0
1.75V/cell	794	702	554	418	267	203	138	95.6	81.3
1.70V/cell	891	766	587	434	273	207	140	96.8	82.2
1.65V/cell	956	809	610	446	279	211	142	98.0	83.0
1.60V/cell	1001	838	626	454	283	214	144	98.8	83.6

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

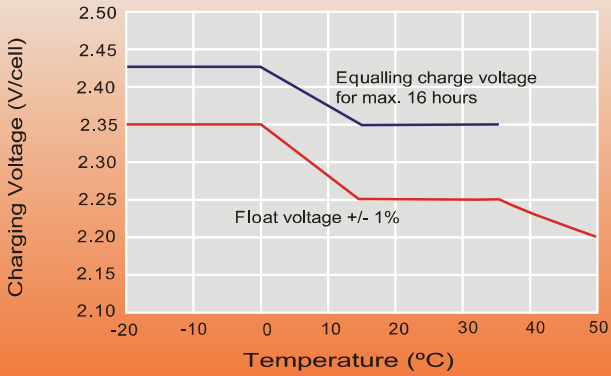
F.V/Tim e	10m in	15m in	30m in	1h	2h	3h	5h	8h	10h
1.85V/cell	1014	973	853	689	459	357	247	174	149
1.80V/cell	1226	1162	984	771	502	387	265	186	159
1.75V/cell	1425	1282	1038	798	513	394	270	189	161
1.70V/cell	1571	1379	1088	823	524	400	273	191	163
1.65V/cell	1657	1435	1120	841	532	406	276	193	164
1.60V/cell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

# Dimensions

## T11 Terminal

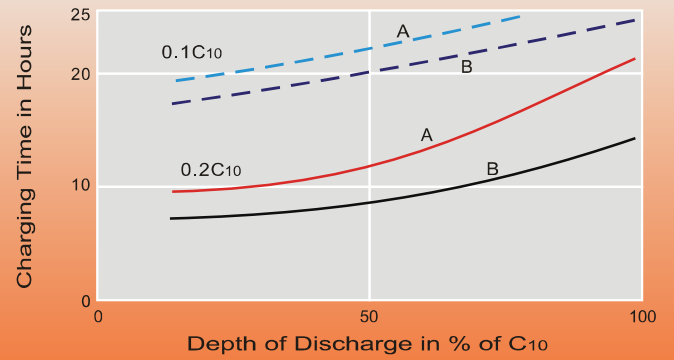


### Discharge Characteristics



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.

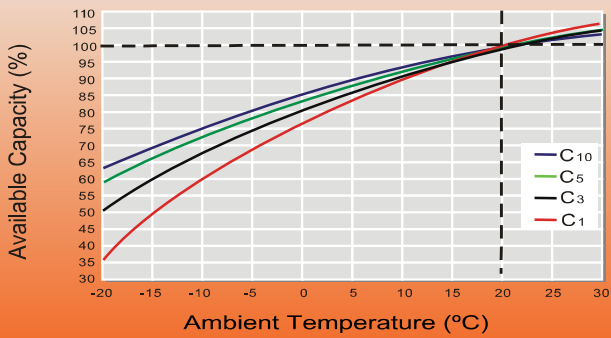
### Charging Characteristics



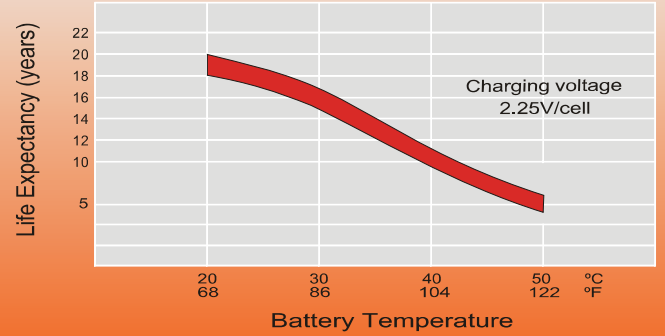
Charge voltage:

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

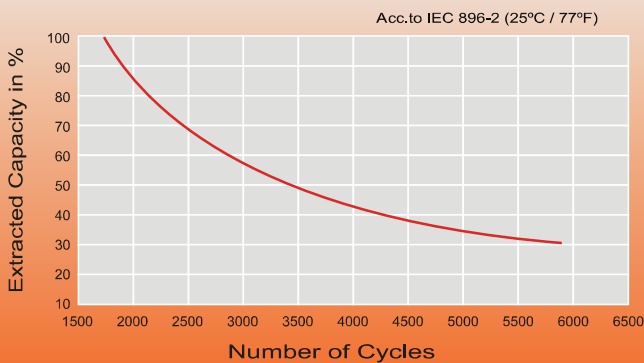
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS Storage Time

