

# **OPzV Tubular Gel Battery for Energy Storage Application**



## Specification

- Standards
  - DIN40742, DIN40744
- Capacity Range
  2V: 150~3000Ah
- Cycle Performance
  1600 cycles @ 80% DOD
  3000 cycles @ 50% DOD
- Certificates
  TLC, UL, CE, IEC
- Warranty
  3 years full replacement + 2 years pro rata

Nominal	Nominal Voltage (V)		Dimensions (mm)				Weight
Voltage (V)	C10 (Ah)	C <sub>100</sub> (Ah)	Length	Width	Height	<b>Total Height</b>	(Kg)
2	200	271	103	206	352.5	385	18
2	300	407	145	206	352.5	385	25.5
2	350	475	124	206	471	503.5	28
2	420	570	145	206	471	503.5	33.5
2	490	665	166	206	471	503.5	38
2	500	679	166	206	471	503.5	38
2	600	773	145	206	646	678.5	46.5
2	800	1028	191	210	646	678.5	62
2	1000	1285	233	210	646	678.5	77
2	1200	1540	275	210	646	678.5	91.5
2	1500	1921	340	210	646	678.5	112.5
2	2000	2590	399	212	772	804	153
2	2500	3238	487	212	772	804	187
2	3000	3885	576	212	772	804	222

## **Technical Features**

- The tubular positive plate effectively prevents shedding of the active material. The positive plate skeleton is made of the multi-alloy casting, with fine grain alloy structure, enhancing the corrosion-resistant capability and ensuring a longer service life.
- The electrolyte is in non-flowing gel state, no acid leakage or delamination phenomenon.
- The imported particular separator with large porosity, low resistance and larger electrolyte storage space, has a high affinity degree with the gel state electrolyte and ensures a longer cycle service life.
- Superior deep discharge performance, battery can be connected with the load even after 100% discharge, after 4 weeks the capacity can be recovered as the initial capacity after recharge.
- Excellent battery recovery ability after deep discharge; with good cycle endurance capability at partial state of charge.



#### **Key Equipment & Material**

- HADI automatic production line imported from Germany: 15,000 KVAh/month production line;
- Fully automatic high-speed emulsification sheering gel making machine;
- Particular microporous separator for gel battery;
- Particular gas phase SiO2 for gel battery.



### **Operation Parameters**

Items	Setting Value				
The max. charge current	0.2C <sub>10</sub> A				
Float charge voltage	2.25V/cell				
Equalizing charge voltage	2.40 V/cell				
LVD1 cut-off voltage	1.92 V/cell				
LVD1 recovery voltage	2.08 V/cell				
LVD2 cut-off voltage	1.86 V/cell				
LVD2 recovery voltage	2.08 V/cell				
Output recovery voltage	2.30 V/cell				
Battery Temperature	-3.50m V/°C/cell				
<b>Compensation Coefficient</b>	The min. compensation temperature is -15°C (when temperature is lower than -5°C, the				
(Float charge, Equalizing	equalizing charge voltage or full charge voltage is compensated as -5°C)				
charge, Full charge voltage)	The max. compensation temperature is 45°C				

Charge Capacity (%C)

120 F

100

80

60

40

20

0

## **Performance Curve**





#### Temperature vs discharge capacity







Depth of charge vs cycles

Charge & discharge curve

