

Tubular Gel Technology  
OPzV Series

**20 OPzV 2500**

2V2500Ah(10hr)

**Complying standards:**

IEC60896-21/22: 2004    IEC61427-2014  
YD/T1360-2005    DIN43539-T5  
DIN40742:1999    GB/T 22473-2008



The ABT OPzV series are valve regulated lead-acid cells which use a combination of tubular positive plate woven gauntlets, pasted negative plate design, and special GEL electrolyte filling techniques, which assure the long life and excellent reliability of the battery. This series is widely used for large range of applications including telecommunication, power generating stations and distribution systems, power supply system, energy storage, UPS system, railway, airport and seaport signaling, emergency lighting, solar and it's suitable for harsh environment and poor power supply condition.

**Mechanical Characteristics**

	SI Unit	EN Unit
Length	487mm	19.17inch
Width	212mm	8.35inch
Height	772mm	30.39inch
Total Height	804mm	31.65inch
Approx. Weight	181.0kg	398.2lbs

Type of material for container and lids:  
ABS Standard (FV0 Optional)

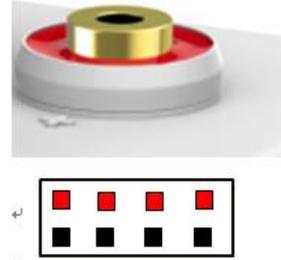
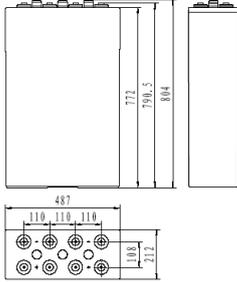
**Product Characteristics**

- Design life: 20 years at 68°F (20°C)
- Very long life according to EUROBAT Classification
- Up to 1500 deep discharge cycles
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC-SiO2 micro-porous separator ensure Low self-discharge rate
- Easy installation vertical or horizontal

**Performance Characteristics**

- Rated voltage: 2V (1 Cell)
- Rated capacity at 68°F (20°C)
  - 10h rate (250A, 1.80V) 2500Ah
  - 5h rate (425A, 1.80V) 2125Ah
  - 1h rate (1250A, 1.80V) 1250Ah
- Internal resistance:
  - 0.17mΩ when fully charged at 68°F (20°C)
- Average self-discharge rate:
  - ≤3% per month 68°F (20°C)
- Maximum discharge current:
  - 9320A(3s) at 68°F (20°C)
- Working temperature range:
  - Discharge: -25~60°C
  - Charge: -10~60°C
  - Storage: -25~60°C
- Charging method:
  - with constant voltage at 68°F (20°C)
  - Maximum charge current:500A
  - Temperature compensation: -3.5mV/°C/piece
  - Cycle use: 2.37V/ piece
  - Standby use: 2.27V/ piece

**Dimensions/Terminal**



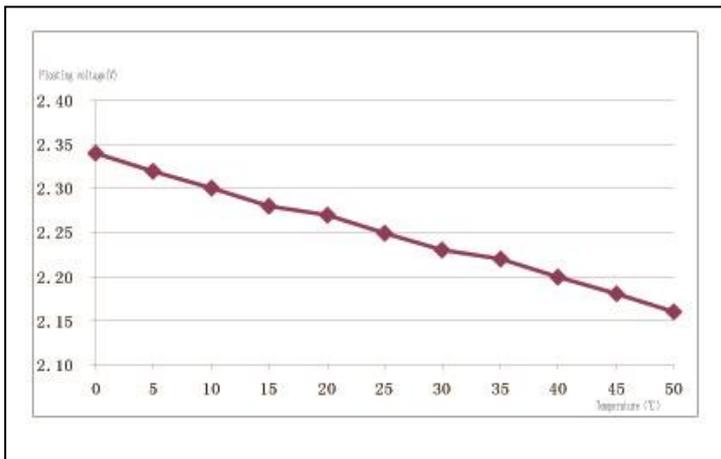
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	3205	2869	2508	2179	1849	1442	941.7	735.8	506.7	429.2	331.7	282.5	147.5	124.7	67.50	33.39	28.24	14.40
1.70	3006	2689	2326	2081	1796	1375	891.7	696.7	479.2	405.0	318.3	272.5	144.2	121.3	66.58	33.05	27.98	14.31
1.75	2869	2571	2274	1980	1700	1317	841.7	660.0	454.2	390.0	305.8	262.5	140.0	118.6	65.75	32.65	27.73	14.23
1.80	2709	2444	2156	1919	1636	1250	795.0	625.0	425.0	363.3	294.2	250.0	135.8	116.4	65.00	32.38	27.40	14.13
1.85	2550	2306	2040	1825	1541	1192	753	591.7	407.5	350.8	278.3	236.7	132.2	113.3	64.08	31.69	26.98	14.04

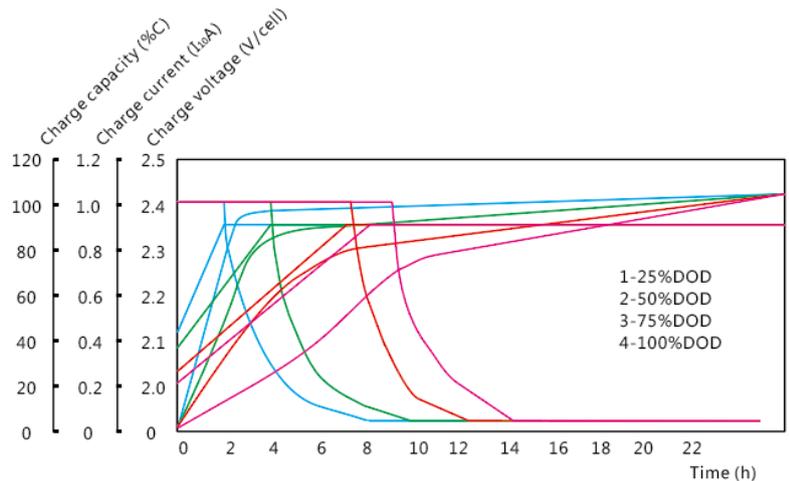
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	5380	4810	4310	3917	3350	2483.3	1633.3	1231.3	1006	851.2	684.5	551.8	293.5	248.7	135.0	67.00	56.50	28.85
1.70	5168	4650	4162	3817	3300	2433.3	1596.7	1203.3	970.2	821.4	660.7	545.2	287.5	243.1	133.3	66.06	55.94	28.63
1.75	4902	4432	4013	3683	3200	2366.7	1553.3	1170.0	946.4	797.6	642.9	525.0	283.3	236.9	131.6	65.21	55.46	28.43
1.80	4331	4119	3827	3533	3100	2316.7	1526.7	1160.0	881.0	744.0	619.0	512.5	278.0	232.1	130.0	64.75	54.88	28.24
1.85	3604	3466	3317	3268	2851	2183.3	1443.8	1093.8	803.6	708.3	574.4	483.9	269.0	226.6	128.1	63.67	54.00	28.06

**Floating Charge Voltage vs. Temperature**



**Cycle charge characteristic curve (at 20°C/68 °F)**



Contact information

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**ABT VRLA Battery: Available power range from 26Ah to 3000Ah.**

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