

Tubular Gel Technology  
OPzV Series

**8 OPzV 800**  
2V800Ah(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	191mm	7.52inch
Width	210mm	8.27inch
Height	646mm	25.43inch
Total Height	678.5mm	26.71inch
Approx. Weight	60.0kg	132.0lbs

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 (80A, 1.80V)	800Ah
5h rate (136A, 1.80V)	680Ah
1h rate (400A, 1.80V)	400Ah
- Internal resistance:
 

0.37mΩ when fully charged at 68°F(20°C)
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- Average self-discharge rate:
 

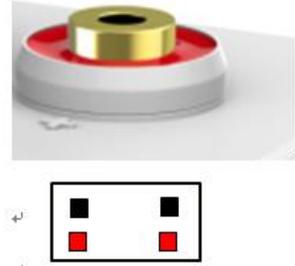
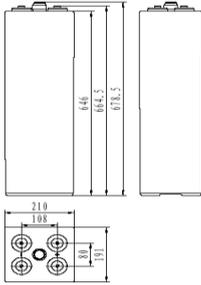
≤3% per month 68°F(20°C)
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- Maximum discharge current:
 

3548A(3s) at 68°F(20°C)
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- 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:160A
Temperature compensation: -3.5mV/°C/piece
Cycle use: 2.37V/ piece
Standby use: 2.27V/ piece

**Dimensions/Terminal**



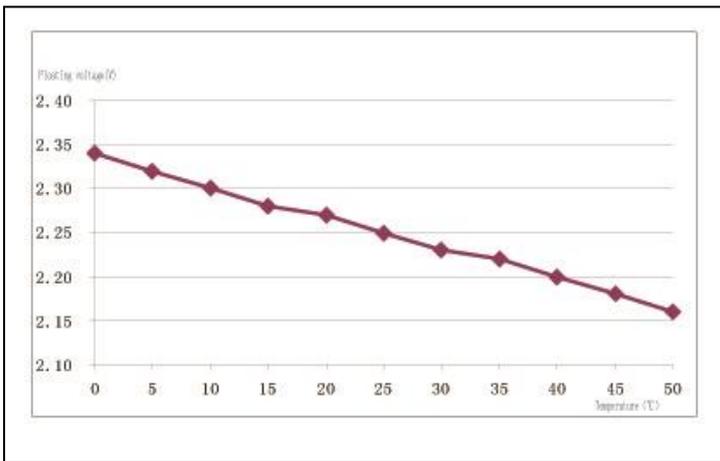
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	1071	964	891	817	672	461	301.3	235.5	162.1	137.3	106.1	90.4	47.3	40.20	21.40	10.37	8.72	4.52
1.70	1025	893	831	771	644	440	285.3	222.9	153.3	129.6	101.9	87.2	46.3	39.60	21.31	10.35	8.68	4.51
1.75	947	843	777	717	624	421	269.3	211.2	145.3	124.8	97.9	84.0	44.0	38.40	21.04	10.32	8.64	4.48
1.80	887	796	729	665	568	400	254.4	200.0	136.0	116.3	94.1	80.0	42.9	35.92	20.80	10.28	8.60	4.45
1.85	823	721	667	604	533	381	241	189.3	130.4	112.3	89.1	75.7	41.7	35.6	20.51	10.20	8.56	4.44

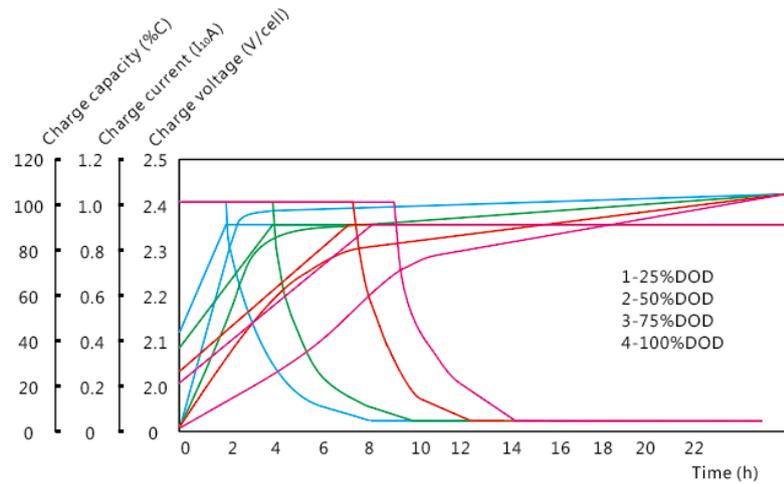
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	1793	1638	1487	1349	1136	790.1	526.0	394.0	321.9	272.4	219.0	176.6	93.9	81.00	43.33	20.93	17.47	9.07
1.70	1723	1572	1417	1293	1088	765.6	506.0	380.0	310.5	262.9	211.4	174.5	92.0	79.47	42.67	20.70	17.36	9.02
1.75	1639	1509	1366	1245	1056	752.0	494.0	372.0	302.9	255.2	205.7	168.0	90.7	76.76	42.13	20.65	17.29	8.96
1.80	1553	1420	1284	1175	1013	732.0	482.7	366.0	281.9	238.1	198.1	164.0	89.0	72.20	41.60	20.55	17.20	8.92
1.85	1461	1265	1152	1046	912	705.3	462.0	350.0	257.1	226.7	183.8	154.9	86.1	71.15	41.00	20.44	17.15	8.88

**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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