

Tubular Gel Technology
OPzV Series

15 OPzV 1500

2V1500Ah(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	340mm	13.39inch
Width	210mm	8.27inch
Height	646mm	25.43inch
Total Height	678.5mm	26.71inch
Approx. Weight	108.6kg	238.9lbs

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 (150A, 1.80V)	1500Ah
5h rate (255A, 1.80V)	1275Ah
1h rate (750A, 1.80V)	750Ah
- Internal resistance:

0.28mΩ when fully charged at 68°F(20°C)

- Average self-discharge rate:

≤3% per month 68°F(20°C)

- Maximum discharge current:

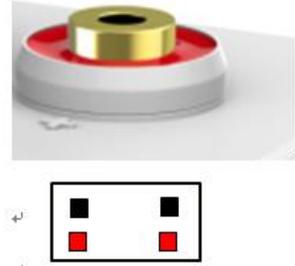
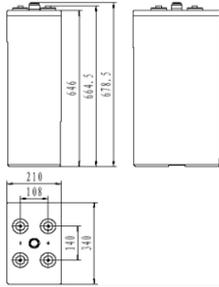
6084A(3s) at 68°F(20°C)

- 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:300A
Temperature compensation: -3.5mV/°C/piece
Cycle use: 2.37V/ piece
Standby use: 2.27V/ piece

Dimensions/Terminal



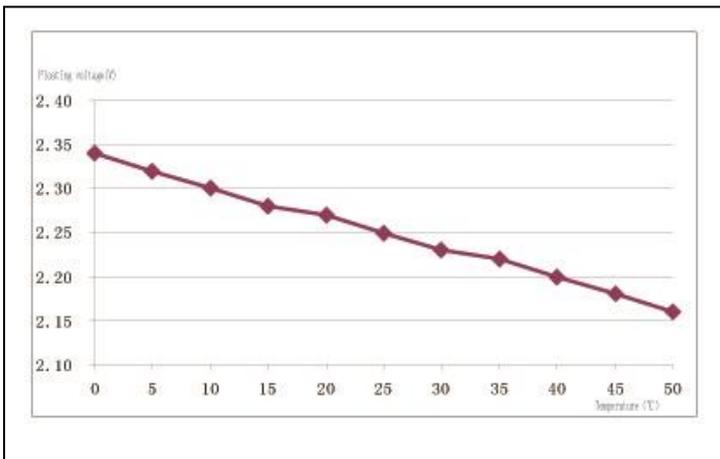
Constant Current Discharge Data (Ampere at 20°C/68 °F)

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	1925	1721	1505	1307	1109	865	565.0	441.5	304.0	257.5	199.0	169.5	88.8	75.38	40.30	19.45	16.30	8.18
1.70	1804	1613	1396	1211	1078	825	535.0	418.0	287.5	243.0	191.0	163.5	86.8	74.25	39.95	19.40	16.24	8.15
1.75	1721	1543	1364	1173	1020	790	505.0	396.0	272.5	234.0	183.5	157.5	82.5	72.00	39.45	19.35	16.18	8.10
1.80	1625	1466	1294	1114	982	750	477.0	375.0	255.0	218.0	176.5	150.0	80.5	67.95	39.00	19.21	16.07	8.05
1.85	1530	1384	1224	1070	925	715	452	355.0	244.5	210.5	167.0	142.0	78.3	66.7	38.45	19.05	16.02	8.03

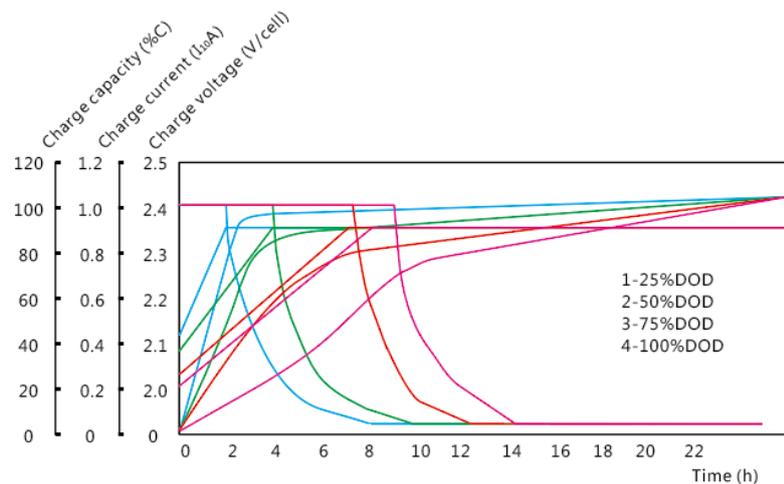
Constant Power Discharge Data (Watts per cell at 20°C/68 °F)

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	3228	2886	2586	2350	2010	1490.0	980.0	738.8	603.6	510.7	410.7	331.1	176.1	151.2	81.00	39.25	32.75	17.00
1.70	3101	2790	2497	2290	1980	1460.0	958.0	722.0	582.1	492.9	396.4	327.1	172.5	149.0	80.00	38.81	32.55	16.91
1.75	2873	2659	2408	2210	1920	1420.0	932.0	702.0	567.9	478.6	385.7	315.0	170.0	144.0	79.00	38.72	32.43	16.80
1.80	2519	2431	2296	2120	1860	1390.0	916.0	696.0	528.6	446.4	371.4	307.5	166.8	135.5	78.00	38.53	32.25	16.73
1.85	2267	2200	2161	1961	1711	1310.0	866.3	656.3	482.1	425.0	344.6	290.4	161.4	133.0	76.88	38.20	32.15	16.65

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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