

Tubular Gel Technology  
OPzV Series

**5 OPzV 250**

2V250Ah(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	124mm	4.88inch
Width	206mm	8.11inch
Height	352.5mm	13.88inch
Total Height	385mm	15.16inch
Approx. Weight	21.1kg	46.42lbs

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

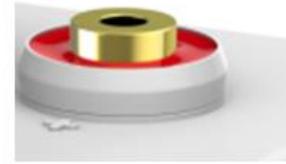
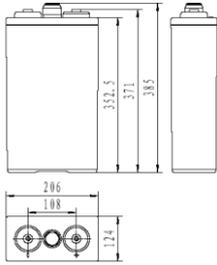
**Product Characteristics**

- 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 (25A, 1.80V) 250Ah
  - 5h rate (42.5A, 1.80V) 212.5Ah
  - 1h rate (125A, 1.80V) 125Ah
- Internal resistance:
  - 0.70mΩ when fully charged at 68°F(20°C)
- Average self-discharge rate:
  - ≤3% per month 68°F(20°C)
- Maximum discharge current:
  - 1472A(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:50A
  - Temperature compensation: -3.5mV/°C/piece
  - Cycle use: 2.37V/ piece
  - Standby use: 2.27V/ piece

**Dimensions/Terminal**



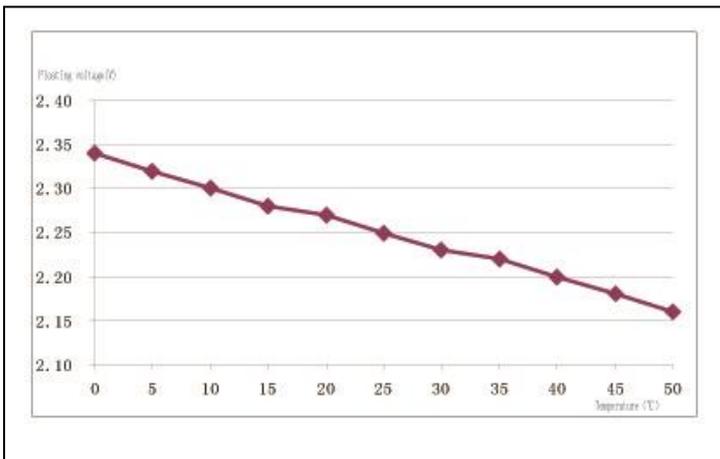
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	378	338	295	257	218	144	94.2	73.6	50.7	42.9	33.2	28.3	14.8	12.47	6.75	3.50	2.97	1.52
1.70	354	317	274	243	212	138	89.2	69.7	47.9	40.5	31.8	27.3	14.4	12.13	6.66	3.47	2.94	1.50
1.75	338	303	265	230	200	132	84.2	66.0	45.4	39.0	30.6	26.3	14.0	11.86	6.58	3.43	2.92	1.48
1.80	319	288	254	221	193	125	79.5	62.5	42.5	36.3	29.4	25.0	13.6	11.64	6.50	3.39	2.88	1.47
1.85	300	272	240	209	182	119	75	59.2	40.8	35.1	27.8	23.7	13.2	11.3	6.41	3.33	2.84	1.44

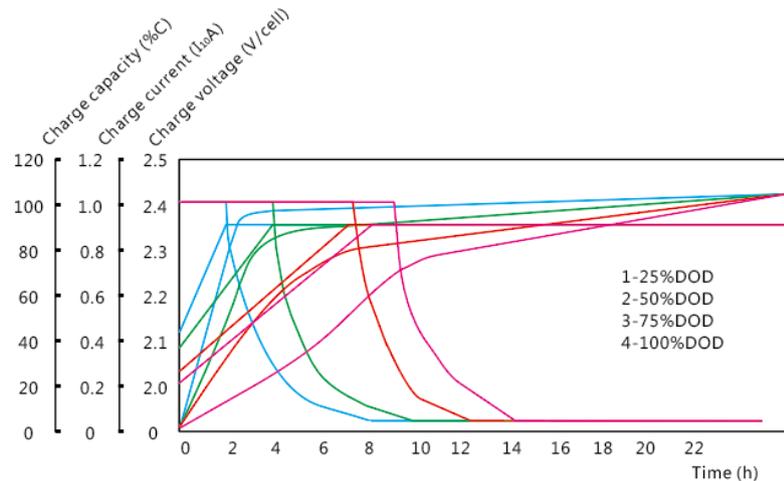
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	5min	10min	15min	20min	30min	1h	2h	3h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.65	629	573	518	465	389	262.5	164.4	123.1	100.0	85.4	66.4	57.7	29.1	24.92	13.78	7.21	6.23	3.06
1.70	595	549	491	448	373	250.0	158.1	118.8	95.6	81.7	65.4	56.5	27.9	24.33	13.70	7.10	6.17	3.03
1.75	558	528	475	430	360	242.5	154.4	116.3	92.5	77.5	63.6	54.2	27.3	23.75	13.58	7.04	6.11	2.99
1.80	503	469	435	398	340	232.5	150.0	114.4	85.8	74.6	60.3	52.3	26.6	23.25	13.52	6.98	6.04	2.96
1.85	451	408	379	354	308	225.0	144.4	109.4	81.3	70.3	56.7	47.7	25.6	22.67	13.36	6.91	5.94	2.93

**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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