



AGM Technology  
 ABT PowerLine SGP Series

**Complying standards:**

IEC61056-21/22:2002

JIS C8702-1/2-2009

**SGP12-42**

12V42Ah(10hr)



ABT PowerLine SGP series is a general purpose battery according to Eurobat Classification with 10 years design life for standby application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.

**Mechanical Characteristics**

	SI Unit	EN Unit
Length	196mm	7.72inch
Width	165mm	6.49inch
Height	165mm	6.49inch
Total Height	170mm	6.69inch
Approx. Weight	12.8kg	28.16lbs

Type of material for container and lids:

ABS Standard (FV0 Optional)

**Product Characteristics**

- 10 years life expectancy in float service at 68°F (20°C)
- High specific energy
- Good cycling performance and over-discharging recovery performance
- Low rate of self-discharge : ≤2% monthly on average (20°C)
- Usable for vertical or horizontal
- Easy installation and handling
- Safety and reliable leakage-proof performance

**Performance Characteristics**

- Rated voltage: 12V (6 cells)
- Rated capacity at 68°F(20°C)
 

20h rate (2.12A, 10.8V)	42.4Ah
10h rate(4.2A, 10.8V)	42.0Ah
1h rate(23.1A, 10.5V)	23.1Ah
- Internal resistance:
 

8.5mΩ when fully charged at 68°F(20°C)
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- Average self-discharge rate:
 

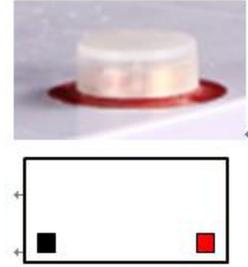
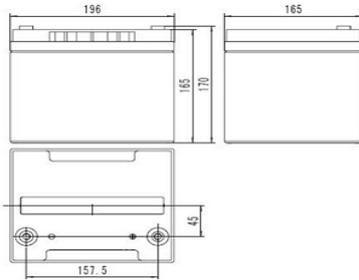
≤2% per month 68°F(20°C)
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- Maximum discharge current:
 

630A(5s) at 68°F(20°C)
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- Working temperature range:
 

Discharge: -15~45°C
Charge: -10~45°C
Storage: -20~55°C
- Charging method:
 

with constant voltage at 68°F(20°C)
Maximum charge current: 12.6A
Temperature compensation: -21mV/°C/piece
Cycle use: 14.52 V/ piece
Standby use: 13.74 V/ piece

**Dimensions/Terminal**



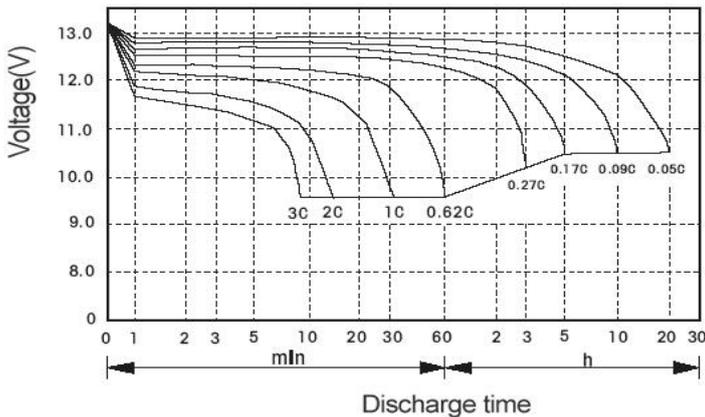
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	10h	20h
1.60	94.50	73.20	57.35	44.76	35.00	26.44	21.37	16.50	11.98	7.360	4.530	2.340
1.65	91.30	70.09	54.71	42.74	33.60	25.43	20.50	15.90	11.61	7.290	4.450	2.290
1.70	89.10	67.29	52.61	41.26	32.40	24.44	19.82	15.30	11.25	7.200	4.380	2.230
1.75	85.40	64.58	50.35	39.55	30.85	23.10	18.80	14.70	10.89	7.140	4.310	2.180
1.80	81.67	61.86	48.57	38.23	29.30	21.78	18.00	14.00	10.50	6.960	4.200	2.120

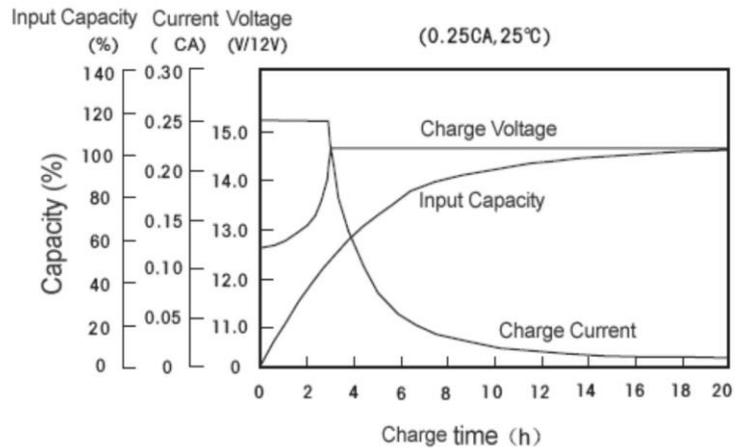
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	10h	20h
1.60	185.0	144.0	117.6	93.10	73.30	52.60	43.00	34.22	23.30	16.80	9.040	4.750
1.65	178.0	139.0	113.3	90.80	70.80	51.05	42.50	33.60	22.90	16.40	8.890	4.650
1.70	172.0	135.0	109.1	87.20	67.30	49.18	41.00	32.83	22.40	16.00	8.780	4.560
1.75	168.0	130.6	104.9	83.80	65.00	46.65	40.50	32.15	22.10	15.70	8.650	4.485
1.80	160.0	126.0	100.7	80.00	62.30	44.30	39.00	31.59	21.70	15.40	8.450	4.375

**Discharge curve under different discharge rate**



**Charge capacity vs. charge time**



Contact information

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

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