



GEL Technology  
GFMJ Series

**Complying standards:**

IEC60896-21/22: 2004  
DIN43539-T5  
IEC61427-2014

**6FMJ-85**  
12V85Ah(10hr)



ABT-GFMJ introduce VRLA battery Gel technology, gel electrolyte design, Thick positive Flat plate technology and patent gel electrolyte compounding and filling technique guarantee battery long service life and super high reliability. They are widely used in telecommunication, power supply system, energy storage, UPS and EPS system, etc.

**Mechanical Characteristics**

	SI Unit	EN Unit
Length	414mm	16.30inch
Width	174mm	6.85inch
Height	218mm	8.58inch
Total Height	228mm	8.98inch
Approx. Weight	34.0kg	74.8lbs

Type of material for container and lids:

ABS Standard (FV0 Optional)

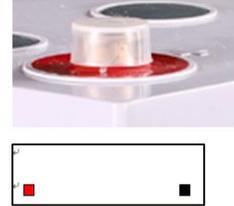
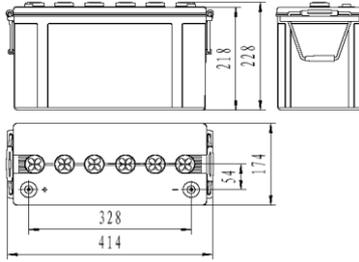
**Product Characteristics**

- 12 years life expectancy in float service at 68°F (20°C)
- Long life according to EUROBAT Classification
- 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 and handling

**Performance Characteristics**

- Rated voltage: 12V (6 cells)
- Rated capacity at 68°F(20°C)
  - 10h rate (8.5A, 10.8V) 85Ah
  - 5h rate (14.45A, 10.8V) 72.25Ah
  - 1h rate (45.76A, 10.8V) 45.76Ah
- Internal resistance:
  - 5.19mΩ when fully charged at 68°F(20°C)
- Average self-discharge rate:
  - ≤2% per month 68°F(20°C)
- Maximum discharge current:
  - 1012A(3s) at 68°F(20°C)
- Working temperature range:
  - Discharge: -20~55°C
  - Charge: -10~55°C
  - Storage: -20~55°C
- Charging method:
  - with constant voltage at 68°F(20°C)
  - Maximum charge current: 17A
  - Temperature compensation: -21mV/°C/piece
  - Cycle use: 14.10V/ piece
  - Standby use: 13.44V/ piece

**Dimensions/Terminal**



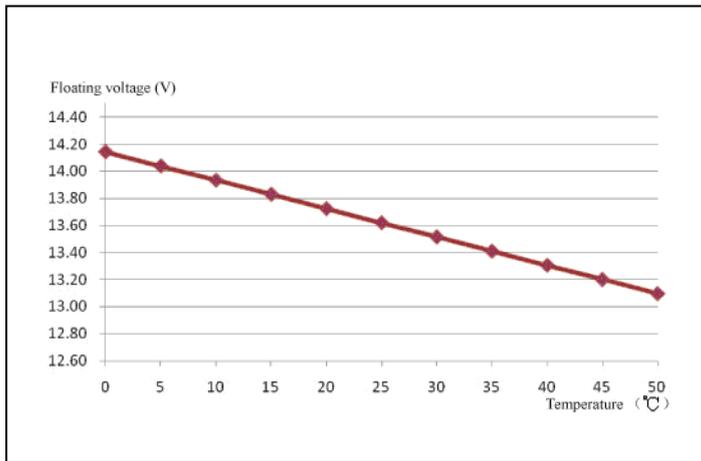
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.60	133	84.96	59.30	50.12	38.17	29.80	23.26	18.62	15.83	14.42	11.17	9.308	4.794	4.046	2.015	0.969	0.927	0.485
1.65	129	83.26	58.11	49.11	37.41	29.21	22.80	18.24	15.50	14.14	10.95	9.121	4.692	3.970	1.972	0.961	0.918	0.476
1.70	125	81.60	56.95	48.14	36.66	28.65	22.31	17.88	15.20	13.86	10.73	8.934	4.599	3.893	1.947	0.952	0.910	0.468
1.75	121	79.97	55.73	47.18	35.92	28.05	21.86	17.53	14.88	13.57	10.51	8.755	4.514	3.817	1.913	0.944	0.901	0.459
1.80	115	77.56	54.14	45.76	34.85	27.21	21.25	17.00	14.45	13.18	10.20	8.500	4.420	3.740	1.887	0.935	0.893	0.451

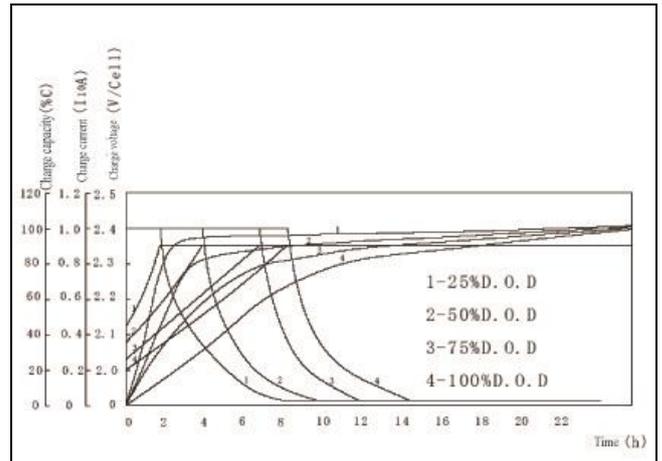
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h	120h	240h
1.60	231	149	104	88.20	67.17	52.45	41.63	33.88	28.96	26.24	20.55	17.31	9.204	7.849	3.948	1.928	1.853	0.979
1.65	226	147	103	87.42	66.96	52.28	41.49	33.56	28.68	26.15	20.36	17.24	9.102	7.780	3.905	1.921	1.845	0.966
1.70	222	146	102	86.64	66.36	52.13	41.06	33.07	28.42	26.05	20.27	17.15	9.013	7.747	3.874	1.914	1.837	0.954
1.75	219	146	101	85.86	66.09	51.89	40.66	32.78	28.11	25.93	20.19	17.07	8.892	7.633	3.825	1.906	1.829	0.941
1.80	214	143	100	85.11	65.52	51.70	40.38	32.47	27.89	25.69	19.99	16.83	8.840	7.517	3.793	1.898	1.821	0.928

**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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