



AGM Technology  
 ABT Thunder TM...W Series

**Complying standards:**  
 IEC60896-21/22:2004  
 JIS C8702-1/2-2009

## TM12-175W

12V42Ah(10hr)



ABT Thunder TM...W series VRLA are batteries according to Eurobat Classification and specially designed for application which need high power backup.

Thunder TM...W is the premium plus VRLA battery for UPS and diesel start application.

### 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	13.9kg	30.58lbs
Type of material for container and lids: ABS Standard (FV0 Optional)		

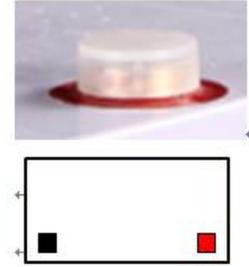
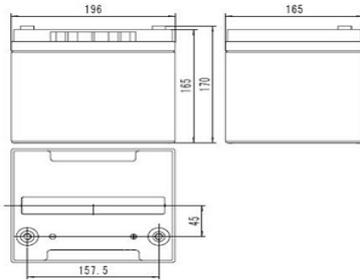
### Product Characteristics

- 12 years life expectancy in float service at 68°F (20°C)
- High current discharge and high power output performance
- High charging performance
- Low rate of self-discharge :≤2% (25°C) monthly on average
- 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)  
15 min watt @ 1.67V 175W per cell  
1h rate(26.3A, 10.2V) 26.3Ah  
10h rate(4.2A, 10.8V) 42Ah
- Internal resistance:  
7.5mΩ when fully charged at 68°F (20°C)
- Average self-discharge rate:  
≤2% per month 68°F (20°C)
- Maximum discharge current:  
500A(5s) at 68°F (20°C)
- 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: 14.52V/ piece  
Standby use: 13.74 V/ piece

**Dimensions/Terminal**



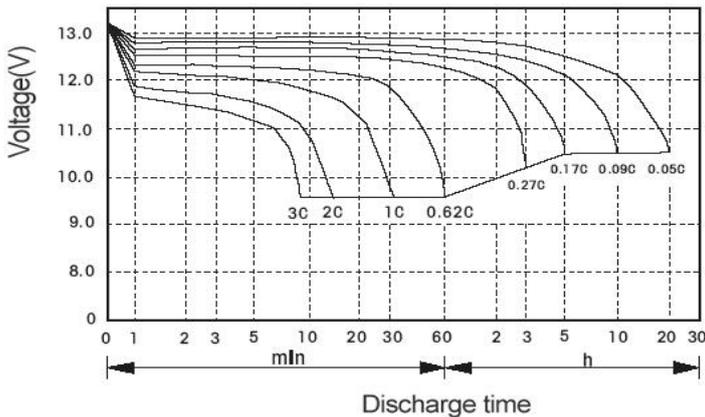
**Constant Current Discharge Data (Ampere at 20°C/68 °F)**

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h
1.60	112	98.4	77.9	53.2	40.7	29.7	23.2	18.2	12.8	10.1	8.31	7.11	4.58
1.67	105	91.6	71.9	49.4	37.8	27.4	21.9	17.2	12.0	9.53	7.81	6.76	4.42
1.70	103	88.8	69.7	48.1	36.7	26.3	21.4	16.8	11.8	9.29	7.62	6.63	4.33
1.75	96.9	83.7	65.8	45.6	35.1	25.2	20.7	16.3	11.4	8.97	7.35	6.37	4.28
1.80	92.2	80.7	63.7	43.7	33.9	23.9	19.7	15.7	10.9	8.67	7.15	6.20	4.20

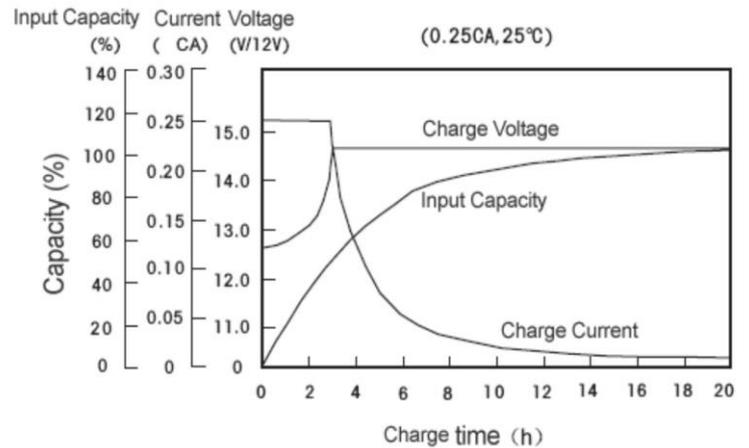
**Constant Power Discharge Data (Watts per cell at 20°C/68 °F)**

End Volt	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h
1.60	205	183	141	95.8	72.3	59.1	45.7	33.5	26.0	20.9	17.1	14.6	9.63
1.67	194	175	134	91.3	69.1	56.4	43.7	32.0	25.1	20.3	16.6	14.2	9.36
1.70	190	170	132	89.7	68.0	55.6	43.0	31.4	24.7	20.0	16.5	14.1	9.25
1.75	182	165	127	86.6	66.0	54.0	41.7	30.5	24.0	19.5	16.0	13.7	9.06
1.80	176	158	123	83.5	63.7	52.3	40.4	29.5	23.4	19.0	15.6	13.4	8.86

**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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