

TM12-1000W

12V 250Ah(20hr)

High Rate Discharge

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

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

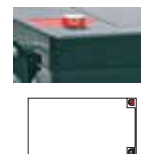
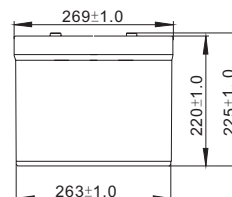
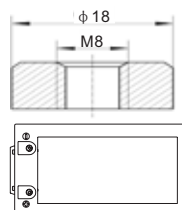
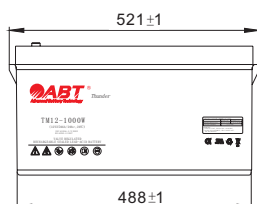
Mechanical Characteristics

	SI Units	English Units
Length	521mm	20.51inch
Width	269mm	10.59inch
Height	220mm	8.66inch
Total Height	225mm	8.86inch
Approx. Weight	81.30kg	179.27lb
Type of material for box and lids : ABS Standard (FV0 Optional)		

Product Characteristics

- Positive and negative grids in lead-calcium tin alloy
- Superior energy density
- More than 40% power output than ABT standard SGP series
- Operates at a low internal pressure
- Usable in any orientation
- A recognized component of UL
- Range of 6V and 12V monobloc from 160W to 1000W per cell for 10' @ 1.60Vpc
- 6 months shelf life at 20°C
- 10 years design life

Dimensions / Terminal



Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Nominal Capacity 68°F(20°C)	10 min wattage @1.60V1000W per cell 1 hour rate (163.0A, 1.60V per cell)163.0Ah 10 hour rate (23.42A, 1.75V per cell) 234.2Ah 20 hour rate (12.5A, 1.75V per cell) 250Ah
Internal Resistance	Fully Charged battery 68°F(20°C) 2.10 mOhms
Mass Energy(Wh/kg)	36.9
Volumic energy(Wh/L)	97.3
Self-Discharge	3% of capacity declined per month at 20°C(average)
Operating Temperature Range	Discharge -20~60°C Charge -10~60°C Storage -20~60°C
Max. Discharge Current	1300A(5s)
Short circuit current	5571A
Charge Methods:	Constant Voltage Charge 68°F(20°C) Cycle use 14.4-15.0V/unit Temperature compensation -30mV/°C/unit Standby use 13.5-13.8V/unit Temperature compensation -20mV/°C/unit Maximum charging current 75 A of rated capacity
Terminal Type	Inserted Thread and bolt M8X φ 18
Torque strength in Nm	12~16
Handle Type	Rope
Flame arrestor	Yes

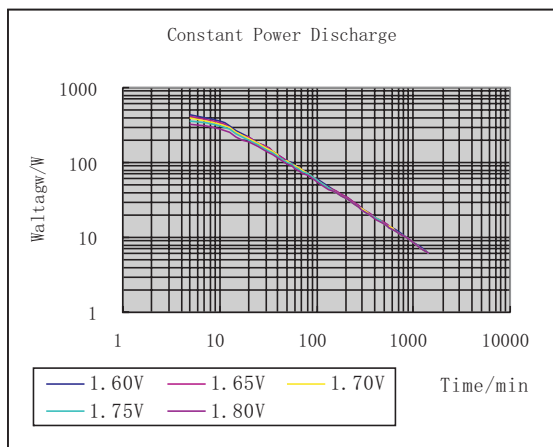
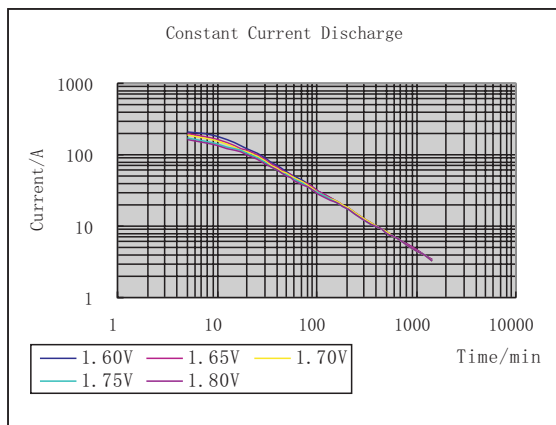
Constant Current Discharge Data (Amperes at 20°C)

End Volt. Per Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	766	591	448	363	309	270	242	221	201	183	163	121.1	95.5	79.5	65.6	53.3	43.8	37.1	32.5	29.0	26.26	24.25	20.54	11.23
1.65V	703	559	429	350	299	263	237	216	196	179	159	117.5	92.8	77.9	64.4	52.4	43.1	36.8	32.2	28.7	25.94	23.95	20.36	11.12
1.70V	661	525	412	338	289	255	231	210	192	175	156	114.4	90.8	76.1	63.3	51.4	42.4	36.4	31.8	28.4	25.69	23.67	20.19	10.99
1.75V	614	497	395	326	279	248	224	204	186	170	152	111.1	88.5	74.1	62.3	50.3	41.7	35.8	31.5	28.0	25.37	23.42	20.02	10.82
1.80V	576	469	373	311	268	240	216	197	180	166	149	108.3	86.5	71.6	61.4	49.2	41.0	35.3	30.9	27.6	24.98	23.10	19.79	10.73

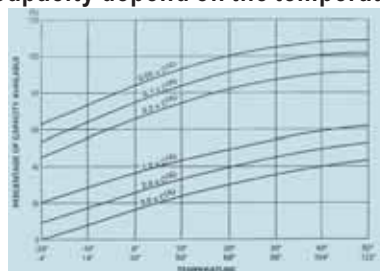
Constant Power Discharge Data (Watts per cell at 20°C)

End Volt. Per Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	1249	1000	807	674	574	507	454	410	372	341	298	217.1	170.5	140.7	118.7	94.5	78.2	66.9	58.9	52.3	47.23	42.93	37.08	19.83
1.65V	1158	940	768	647	556	495	443	400	365	334	289	211.7	167.5	138.0	117.0	92.8	77.1	66.0	58.0	51.7	46.75	42.57	36.75	19.77
1.70V	1069	880	729	619	537	479	431	390	356	326	282	206.3	164.0	135.6	114.9	91.9	76.3	64.9	57.5	51.4	46.23	42.32	36.43	19.69
1.75V	968	810	685	592	516	463	418	379	346	317	275	200.2	160.2	132.2	112.8	89.8	74.6	64.0	56.6	50.6	45.85	41.94	36.14	19.41
1.80V	880	750	653	567	498	447	402	367	336	307	267	192.2	156.3	128.2	110.8	87.9	73.4	63.2	55.8	50.0	45.28	41.45	35.74	19.32

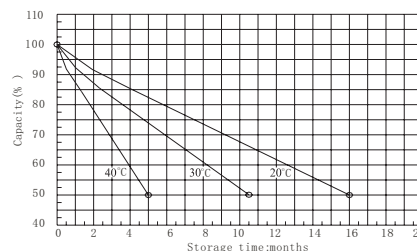
Performance drawing



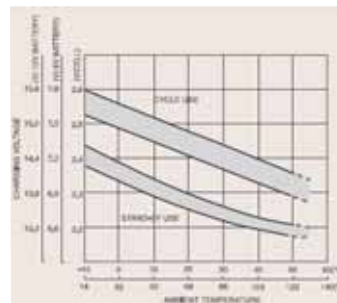
Capacity depend on the temperature



Capacity Retention Characteristic



Charge voltage depend on the temperature



Contact information

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ABT VRLA Battery: Available Power Range From 7Ah to 3000Ah

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