



TM12-800W

12V 175Ah(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	532mm	20.94inch
Width	206mm	8.11inch
Height	214mm	8.43inch
Total Height	219mm	8.62inch
Approx. Weight	64.30kg	141.78lbs

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

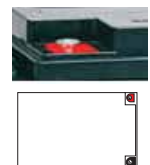
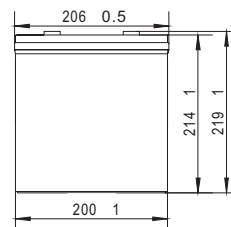
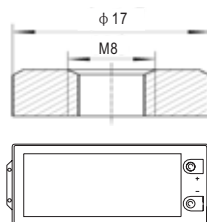
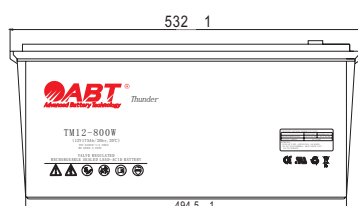
Product Characteristics

- 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

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Nominal Capacity 68°F(20°C)	10 min wattage @1.60V800W per cell 1 hour rate (117.0A, 1.60V per cell)117.0 Ah 10 hour rate(16.42A, 1.75V per cell) 164.2Ah 20 hour rate (8.75A, 1.75V per cell) 175Ah
Internal Resistance	Fully Charged battery 68°F(20°C) 2.7 mOhms
Mass Energy(Wh/kg)	32.66
Volumic energy(Wh/L)	89.54
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	1225A(5s)
Short circuit current	4333A
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 52.5 A of rated capacity
Terminal Type	Inserted Thread and bolt M8X φ 17
Torque strength in Nm	12~16
Handle Type	Rope
Flame arrestor	Yes

Dimensions / Terminal



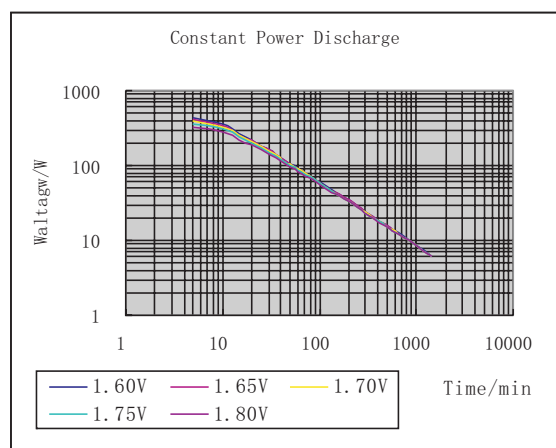
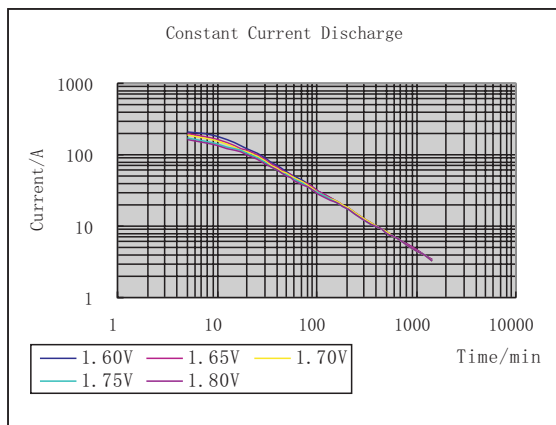
Constant Current Discharge Data (Amperes at 20°C)

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	590	445	340	280	237	201	179	162	148	135	117	85.5	66.8	55.0	46.3	37.6	30.9	26.2	22.9	20.5	18.50	16.80	14.44	7.87
1.65V	548	418	321	270	229	196	174	158	144	133	114	83.6	65.3	54.1	45.7	37.1	30.5	25.9	22.7	20.3	18.35	16.67	14.34	7.80
1.70V	510	394	304	257	220	190	169	153	141	129	112	81.5	63.7	53.2	45.2	36.4	30.1	25.7	22.5	20.1	18.21	16.55	14.23	7.74
1.75V	484	367	290	244	211	183	163	148	136	125	108	79.0	62.4	52.1	44.5	35.8	29.6	25.3	22.3	20.0	18.01	16.42	14.08	7.65
1.80V	455	338	276	236	202	176	157	143	132	122	106	76.0	61.0	51.2	43.8	35.0	29.1	25.0	22.1	19.7	17.84	16.26	13.98	7.55

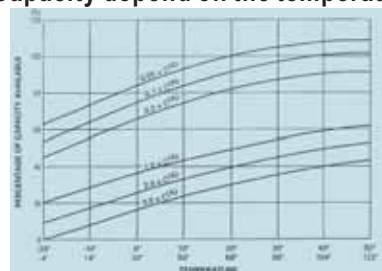
Constant Power Discharge Data (Watts per cell at 20°C)

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	995	800	648	541	459	404	356	320	287	263	229	169.5	133.7	111.7	93.9	75.1	62.3	53.2	46.6	41.6	37.70	34.34	29.68	15.87
1.65V	941	765	622	525	445	391	348	313	280	257	224	167.0	132.0	110.4	92.9	74.2	61.7	52.6	46.2	41.2	37.40	34.04	29.40	15.82
1.70V	901	720	595	503	431	380	340	305	273	251	219	163.5	130.4	108.5	91.5	73.5	61.0	52.0	45.7	40.9	37.03	33.75	29.14	15.75
1.75V	854	676	564	479	413	367	329	296	266	244	215	159.8	128.0	106.4	89.9	72.6	60.3	51.5	45.2	40.5	36.74	33.46	28.85	15.53
1.80V	820	630	534	457	397	356	319	287	259	238	210	155.9	125.4	104.6	88.6	71.7	59.6	50.9	44.7	40.1	36.37	33.16	28.59	15.45

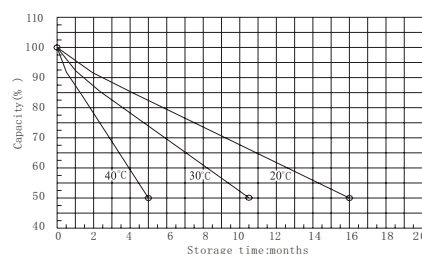
Performance drawing



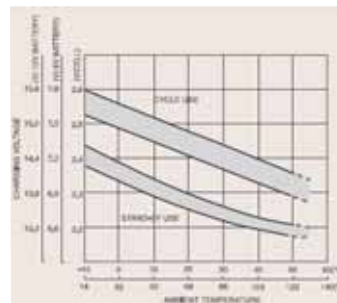
Capacity depend on the temperature



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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