

TM12-830W

12V 200Ah(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

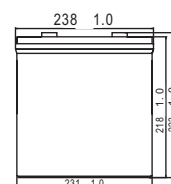
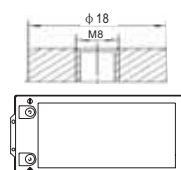
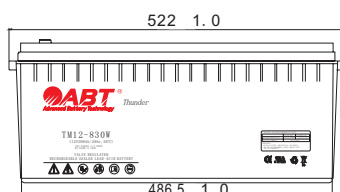
	SI Units	English Units
Length	522mm	20.55inch
Width	238mm	9.37inch
Height	218mm	8.58inch
Total Height	223mm	8.78inch
Approx. Weight	68.05kg	150.05lbs

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 165W 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 @1.60V830W per cell 1 hour rate (134.0A, 1.60V per cell)134.0 Ah 10 hour rate (18.64A, 1.75V per cell)186.4Ah 20 hour rate (10.0A, 1.75V per cell) 200Ah
Internal Resistance	Fully Charged battery 68°F(20°C) 2.6 mOhms
Mass Energy(Wh/kg)	35.27
Volumic energy(Wh/L)	88.62
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	4500A
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 60A of rated capacity
Terminal Type	Inserted Thread and bolt M8X φ 18
Torque strength in Nm	12~16
Handle Type	Rope
Flame arrestor	Yes

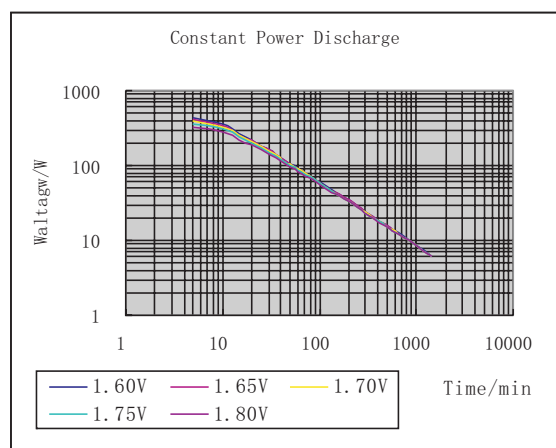
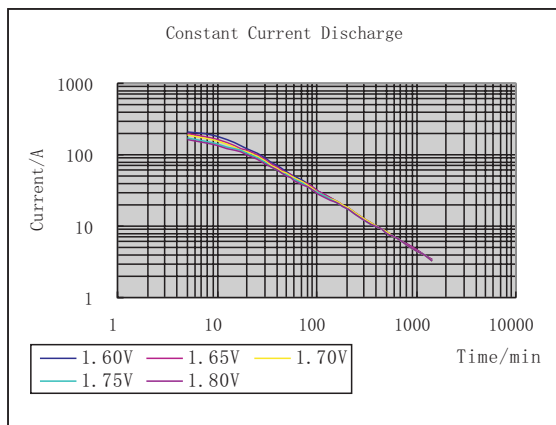
Constant Current Discharge Data (Amperes at 20°C)

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	610	471	389	322	275	238	210	188	170	155	134	96.7	76.8	64.2	53.3	43.4	35.3	30.5	26.9	24.0	21.55	19.28	16.85	9.03
1.65V	573	449	370	310	266	229	203	183	166	151	132	94.7	75.5	63.0	52.4	42.7	34.7	30.1	26.7	23.8	21.31	19.10	16.70	8.86
1.70V	544	426	353	298	257	221	198	179	163	148	128	92.6	74.4	62.1	51.6	42.0	34.2	29.7	26.4	23.5	21.14	18.87	16.52	8.73
1.75V	516	400	336	286	247	213	192	174	158	145	125	90.5	73.0	60.9	50.7	41.2	33.5	29.4	26.1	23.3	20.89	18.64	16.32	8.58
1.80V	490	374	320	273	235	206	187	169	155	141	123	88.4	71.8	59.8	50.0	40.4	33.0	29.0	25.8	23.1	20.64	18.46	16.16	8.40

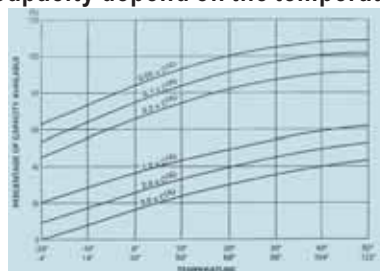
Constant Power Discharge Data (Watts per cell at 20°C)

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	1037	830	672	559	476	422	378	341	311	285	245	175.9	141.5	117.4	98.9	79.1	64.9	55.5	48.4	43.2	39.01	35.63	30.70	16.46
1.65V	984	795	645	538	464	412	369	333	303	279	238	172.2	138.3	114.5	96.9	77.6	64.0	54.8	47.8	42.7	38.64	35.39	30.40	16.41
1.70V	924	754	615	519	449	399	358	325	295	272	232	168.7	135.3	112.6	94.3	76.3	63.3	54.1	47.3	42.4	38.32	35.12	30.12	16.34
1.75V	861	700	585	497	431	384	347	315	287	265	225	164.0	131.6	109.7	92.1	74.5	61.9	53.4	46.8	42.0	38.00	34.77	29.87	16.11
1.80V	791	651	554	476	414	372	336	305	281	259	219	159.5	127.1	106.4	89.9	73.0	60.9	52.5	46.3	41.5	37.63	34.40	29.66	16.03

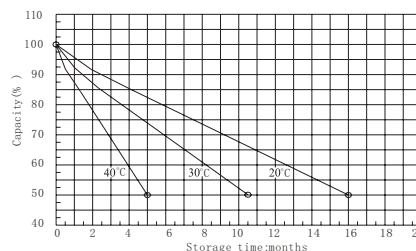
Performance drawing



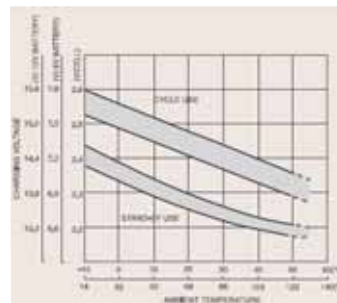
Capacity depend on the temperature



Capacity Retention Characteristic



Charge voltage depend on the temperature



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

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