

TM6-830W

6V 180Ah(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	306mm	12.05inch
Width	169mm	6.65inch
Height	222mm	8.74inch
Total Height	227mm	8.94inch
Approx Weight	31.00kg	68.36lbs
Type of material for Box and lids : ABS Standard (FV0 Optional)		

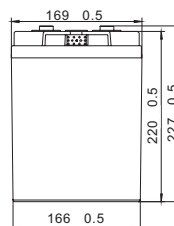
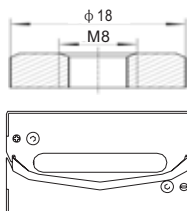
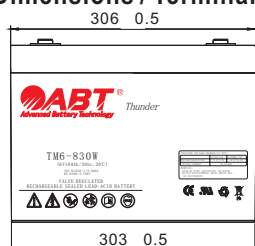
Product Characteristics

- 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	6V
Number of cell	3
Nominal Capacity 68°F(20°C)	10 min wattage @1.60V 830W per cell 1 hour rate (121.0A, 1. 60V per cell)121.0 Ah 10 hour rate (16.75A, 1.75V per cell) 167.5Ah 20 hour rate (9.0A, 1.75V per cell) 180Ah
Internal Resistance	Fully Charged battery 68°F(20°C) 1.55 mOhms
Mass Energy(Wh/kg)	34.84
Volumic energy(Wh/L)	94.07
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	1260A(5 s)
Short circuit current	3750A
Charge Methods:	Constant Voltage Charge 68°F(20°C) Cycle use 7.2-7.5V/ unit Temperature compensation -30mV/°C/ unit Standby use 6.75-6.9V/ unit Temperature compensation -20mV/°C/ unit Maximum charging current 54A of rated capacity
Terminal Type	Inserted Thread and bolt M8X φ 18
Torque strength in Nm	12~16
Handle Type	Incorporated
Flame arrester	Yes

Dimensions / Terminal



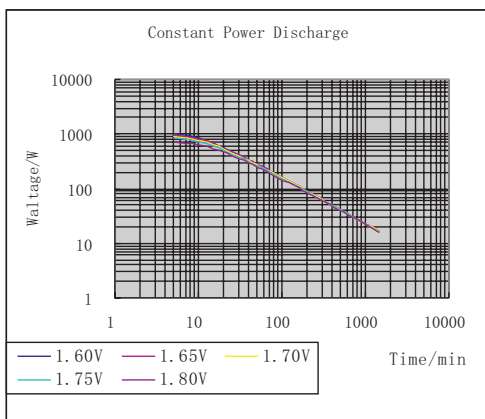
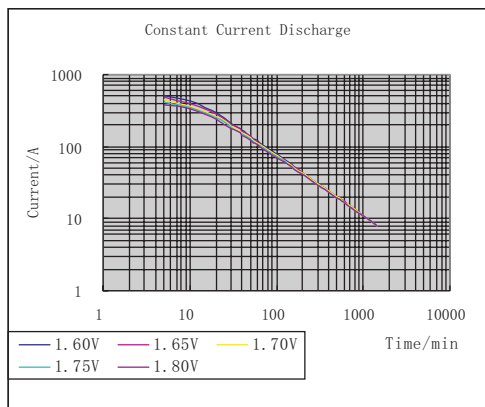
Constant Current Discharge Data (Amperes at 20°C)

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	560	433	350	290	248	215	189	169	153	140	121	88.5	68.5	56.3	46.6	38.7	32.2	27.5	23.9	21.2	19.08	17.2	15.07	8.35
1.65V	520	410	330	278	238	207	183	164	149	136	118	85.9	66.7	55.0	45.8	37.9	31.7	27.2	23.6	21.1	18.92	17.04	14.99	8.34
1.70V	486	390	316	267	229	199	177	158	144	133	114	83.3	65.3	53.9	45.0	37.2	31.2	26.8	23.4	20.9	18.77	16.89	14.93	8.33
1.75V	451	368	301	256	219	192	170	153	140	129	111	80.7	63.6	52.7	44.2	36.4	30.7	26.5	23.2	20.7	18.61	16.75	14.82	8.31
1.80V	420	349	287	246	211	184	165	148	135	124	107	78.1	62.0	51.5	43.3	35.6	30.1	26.2	23.0	20.5	18.48	16.64	14.71	8.29

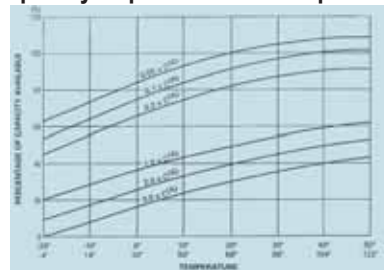
Constant Power Discharge Data (Watts per cell at 20°C)

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	421	377	340	309	283	247	177.8	138.7	115.9	96.4	78.7	65.2	55.2	48.4	43.2	39.01	35.52	30.70	16.61
1.65V	974	786	649	540	463	408	366	332	302	277	240	174.6	136.2	114.5	95.2	77.4	64.5	54.8	48.0	42.9	38.80	35.25	30.50	16.41
1.70V	906	744	618	517	447	394	356	323	294	270	234	171.3	134.0	112.6	94.0	76.3	63.7	54.3	47.7	42.6	38.59	34.98	30.23	16.31
1.75V	829	697	584	492	429	380	343	312	283	261	227	166.1	131.1	110.6	92.5	75.0	62.7	53.6	47.1	42.3	38.23	34.71	29.92	16.11
1.80V	773	656	548	467	407	364	329	300	274	253	220	162.1	127.5	108.3	91.2	73.6	61.7	52.9	46.5	41.8	37.82	34.40	29.66	16.03

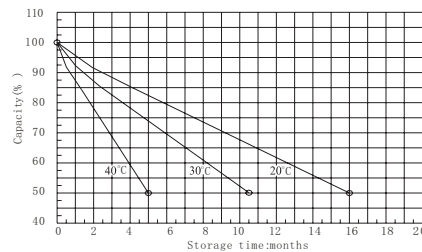
Performance drawing



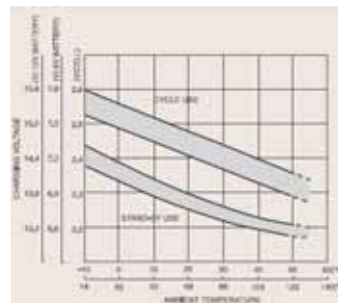
Capacity depend on the temperature



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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