



AGM TECHNOLOGY
ABT Thunder TM...W Series

TM12-165W

12V 26Ah(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	166mm	6.54inch
Width	175mm	6.89inch
Height	125mm	4.92inch
Total Height	125mm	4.92inch
Approx. Weight	9.50kg	20.95lbs

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

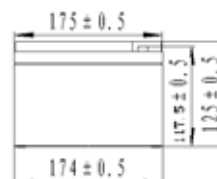
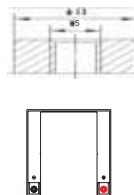
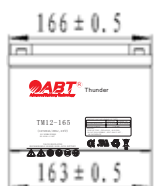
Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Nominal Capacity 68°F(20°C)	10 min wattage @1.60V/165W per cell 1 hour rate (18.2A, 1.60V per cell)18.2Ah 10 hour rate (2.42A, 1.75V per cell) 24.2Ah 20 hour rate(1.30A, 1.75V per cell) 26Ah
Internal Resistance	Fully Charged battery 68°F(20°C) 9 mOhms
Mass Energy(Wh/kg)	31.84
Volumic energy(Wh/L)	85.92
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	390A(5s)
Short circuit current	1300A
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 7.8A of rated capacity
Terminal Type	Inserted Thread and bolt M6Xφ16
Torque strength in Nm	3~4
Handle Type	No
Flame arrester	Yes

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



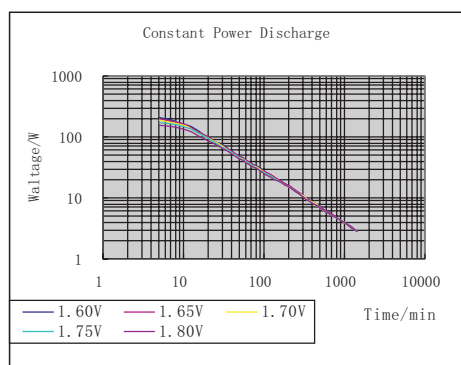
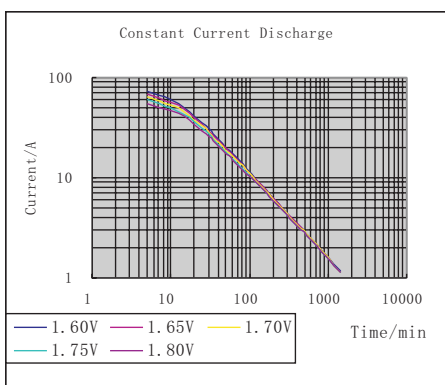
Constant Current Discharge Data (Amperes at 20°C)

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	111.8	85.2	61.5	47.9	39.5	33.8	29.5	26.0	23.2	21.0	18.2	13.80	10.95	8.84	7.15	5.75	4.82	4.17	3.71	3.30	2.98	2.61	2.25	1.24
1.65V	106.4	82.0	59.8	46.6	38.6	33.2	29.0	25.6	22.8	20.6	17.9	13.58	10.74	8.63	6.95	5.61	4.68	4.05	3.56	3.18	2.86	2.54	2.16	1.23
1.70V	102.1	79.1	57.9	45.4	37.8	32.5	28.5	25.2	22.4	20.2	17.5	13.32	10.50	8.39	6.76	5.47	4.55	3.88	3.40	3.04	2.79	2.47	2.09	1.23
1.75V	98.1	76.2	56.0	44.1	37.0	31.8	27.9	24.7	21.9	19.9	17.2	12.99	10.29	8.20	6.52	5.29	4.39	3.69	3.25	2.94	2.64	2.42	2.03	1.22
1.80V	92.9	73.4	53.8	42.9	36.1	31.0	27.3	24.2	21.6	19.5	16.9	12.75	10.03	7.94	6.31	5.07	4.20	3.56	3.13	2.80	2.54	2.33	1.98	1.17

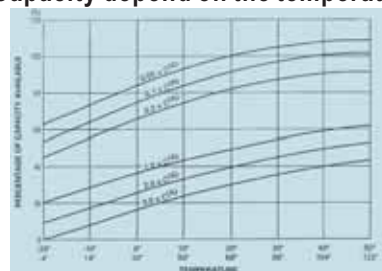
Constant Power Discharge Data (Watts per cell at 20°C)

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	223.8	165.0	118.7	92.5	76.0	64.0	56.3	49.7	44.9	40.2	34.7	27.95	22.22	16.91	13.54	10.96	9.09	7.66	6.69	6.01	5.46	4.96	4.29	2.42
1.65V	212.8	158.2	113.3	88.9	74.0	62.6	55.0	48.5	43.9	39.2	33.6	27.26	21.59	16.51	13.29	10.77	8.93	7.56	6.64	5.95	5.39	4.91	4.25	2.41
1.70V	204.5	148.8	108.1	85.8	71.7	61.1	53.3	47.3	42.9	38.5	32.8	26.52	20.95	16.14	12.98	10.58	8.78	7.47	6.57	5.89	5.34	4.87	4.21	2.38
1.75V	195.4	138.5	102.5	82.3	69.1	59.5	51.8	46.2	41.8	37.4	31.9	25.77	20.31	15.67	12.71	10.38	8.62	7.35	6.49	5.80	5.26	4.82	4.16	2.36
1.80V	186.2	127.0	96.5	79.0	66.6	57.5	49.7	45.0	40.8	36.6	30.8	24.93	19.64	15.18	12.42	10.19	8.47	7.25	6.41	5.73	5.20	4.77	4.11	2.34

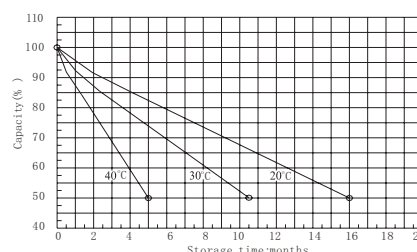
Performance drawing



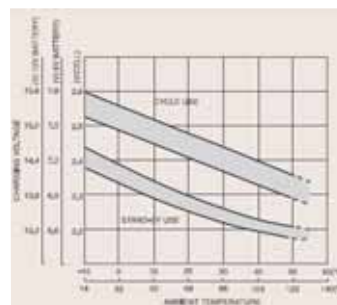
Capacity depend on the temperature



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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 (Edition: May, 2011)