

VRLA AGM cells

ATP2-200AH

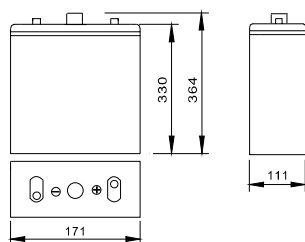


ATP VRLA AGM cells are designed with state-of-the-art AGM (Absorbent Glass Mat) technology, high-performance plates and electrolyte. With high performance features, this range is suitable for all general purpose applications offering stable quality and high reliability, long life, maintenance free operation and heavy duty gratings.

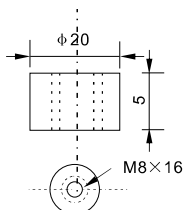
Specifications

Nominal Voltage		2V
Rated capacity (20 hour rate)		200Ah
Dimensions	Length	171±2mm(6.73inch)
	Width	111 ±2mm(4.37inch)
	Height	330±2mm(12.99inch)
	Total Height	364±2mm(14.33inch)
Approx. Weight		12.7kg(28.0lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	10HR(10.8V)	200Ah
	3HR(10.8V)	150Ah
	1HR(10.5V)	110Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.8m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity: 91 %
	6 months	Remaining Capacity: 82 %
	12 months	Remaining Capacity: 65 %
Nominal operating temperature		25°C ±3°C (77°F ±5°F)
Operating temperature range	Discharge	-15°C-50°C (5°F-122°F)
	Charge	-10°C-50°C (14°F-122°F)
	Storage	-20°C-50°C (-4°F-122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		40A
Maximum discharge current		1500A(5 sec.)
Designed floating life(20°C)		15 years

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

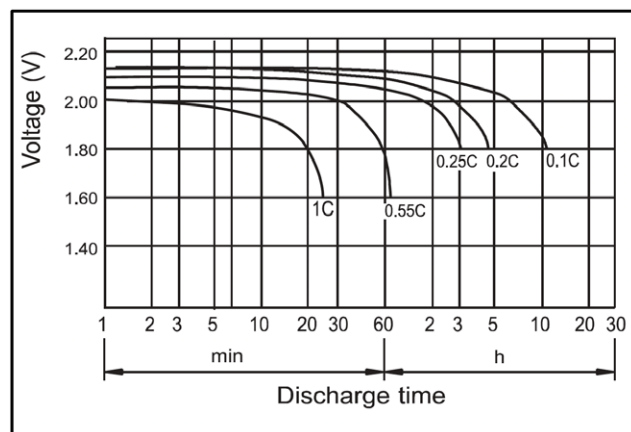
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	278	182	126	73.7	53.0	42.4	36.5	31.4	24.8	20.5	10.8
1.65V	271	178	122	73.3	52.7	42.2	36.3	31.2	24.6	20.4	10.8
1.70V	261	173	118	72.6	52.4	41.9	36.1	31.0	24.5	20.4	10.7
1.75V	252	169	115	71.5	52.0	41.6	35.8	30.8	24.3	20.2	10.7
1.80V	239	163	111	69.7	50.4	40.4	34.7	29.9	23.6	20.1	10.6

Constant Power Discharge Characteristics Unit:W(25°C,77°F)

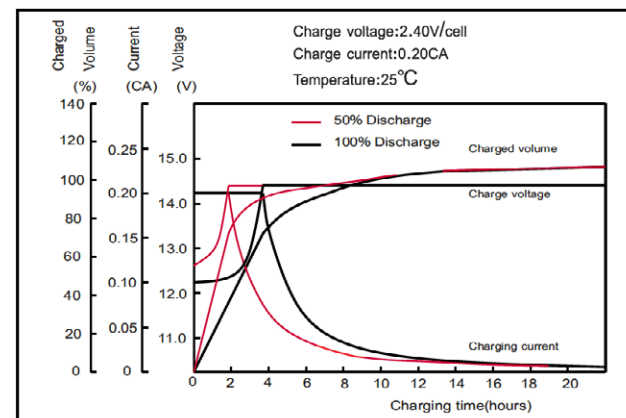
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	509	340	239	142	104	83.2	71.9	61.9	49.3	40.7	21.6
1.65V	497	334	232	141	103	82.7	71.5	61.5	49.0	40.6	21.5
1.70V	478	323	225	140	103	82.1	71.0	61.1	48.7	40.5	21.5
1.75V	462	315	218	138	102	81.5	70.5	60.7	48.4	40.3	21.3
1.80V	438	304	211	135	98.9	79.1	68.4	58.9	46.9	40.0	21.2

Note: The above characteristics data can be obtained within three charge or discharge cycles.

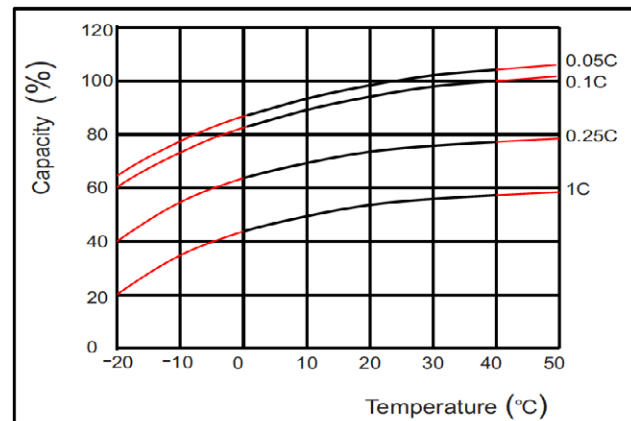
Discharge characteristics(25°C)



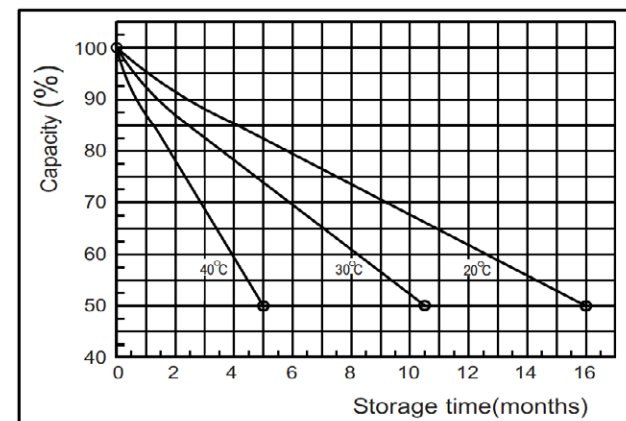
Charging characteristics



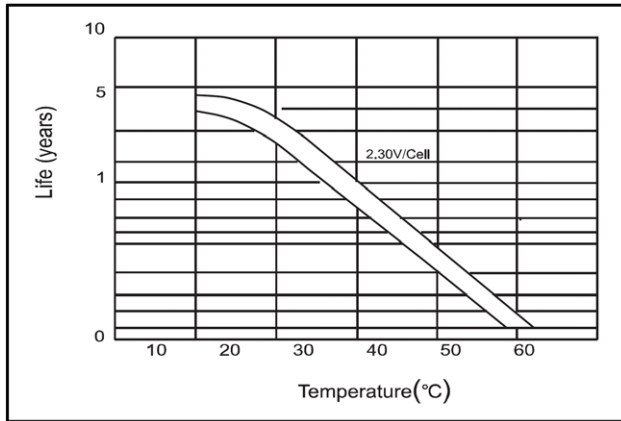
Effect of Temperature on Capacity



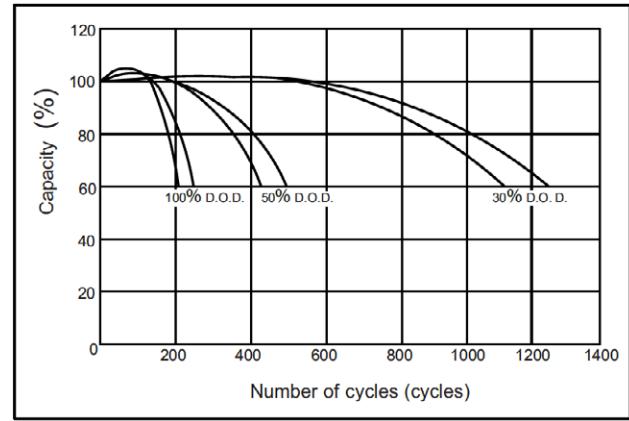
Self-discharge characteristics



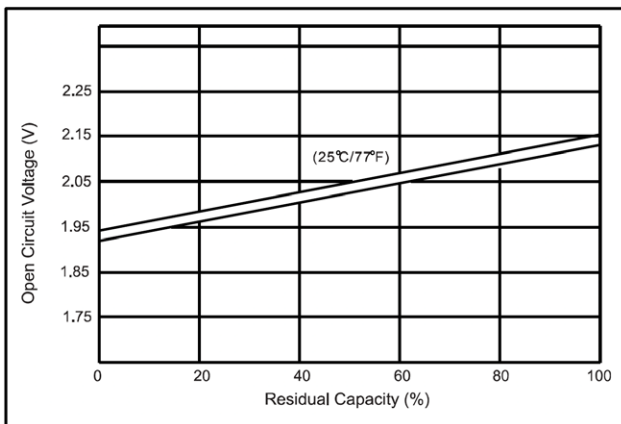
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature

