

VRLA AGM cells

ATP2-300AH

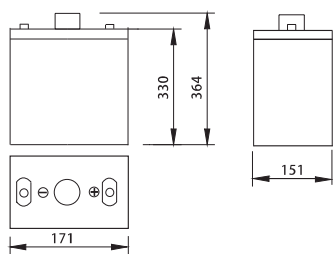


ATP VRLA AGM cells are designed with state-of-the-art AGM (Absorbent Glass Mat) technology, high-performance plates and electrolyte. With high performance features, this range is suitable for all general purpose applications offering stable quality and high reliability, long life, maintenance free operation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

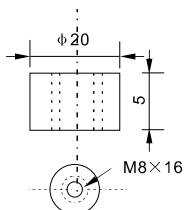
Specifications

Nominal Voltage		2V
Rated capacity (20 hour rate)		300Ah
Dimensions	Length	171±2mm(6.73inch)
	Width	151±2mm(5.94inch)
	Height	330±2mm(12.99inch)
	Total Height	364±2mm(14.33inch)
Approx. Weight		18kg(39.7lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	10HR(10.8V)	300Ah
	3HR(10.8V)	225Ah
	1HR(10.5V)	165Ah
Terminal type		T20
Internal resistance (Fully charged, 25°C)		Approx. 0.7mΩ
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		60A
Maximum discharge current		2100A(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)

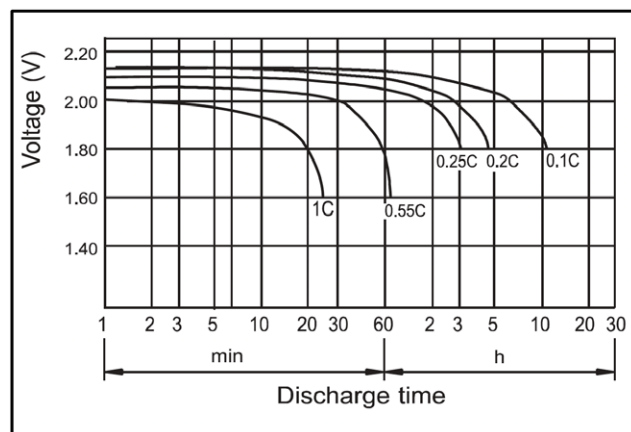
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	417	273	189	111	79.6	63.6	54.8	47.1	37.2	30.7	16.2
1.65V	407	268	183	110	79.1	63.3	54.5	46.8	37.0	30.6	16.2
1.70V	392	259	178	109	78.5	62.8	54.1	46.5	36.7	30.5	16.1
1.75V	379	253	172	107	78.0	62.4	53.7	46.2	36.5	30.4	16.0
1.80V	359	244	166	105	75.7	60.5	52.1	44.8	35.4	30.2	15.9

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

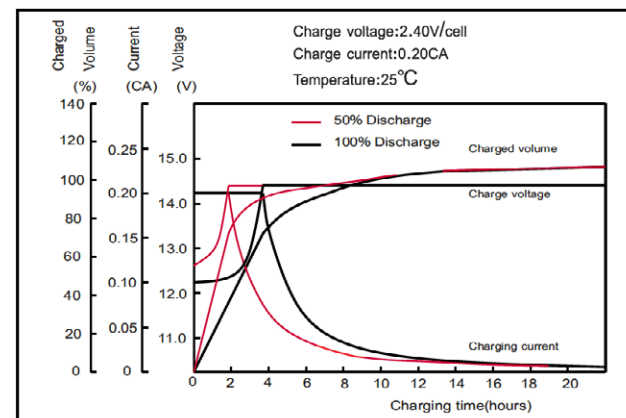
F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	763	511	359	213	156	125	108	92.8	74.0	61.1	32.4
1.65V	745	500	348	212	155	124	107	92.3	73.6	61.0	32.3
1.70V	717	485	338	210	154	123	107	91.7	73.0	60.8	32.2
1.75V	693	473	327	207	153	122	106	91.0	72.5	60.4	32.0
1.80V	656	456	316	202	148	119	103	88.3	70.4	60.0	31.8

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

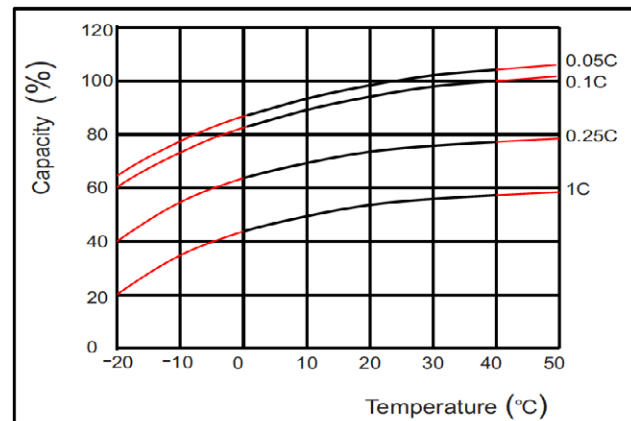
Discharge characteristics(25°C)



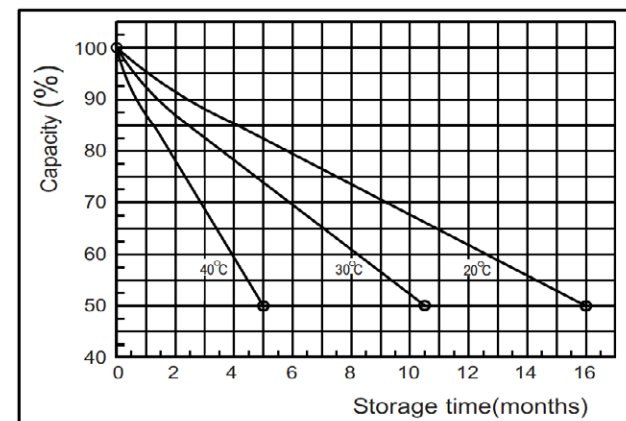
Charging characteristics



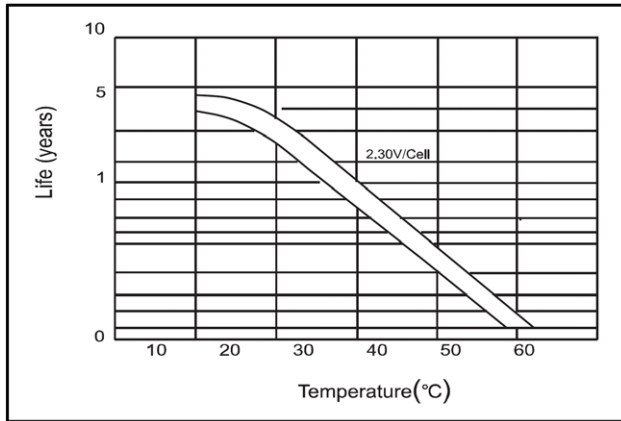
Effect of Temperature on Capacity



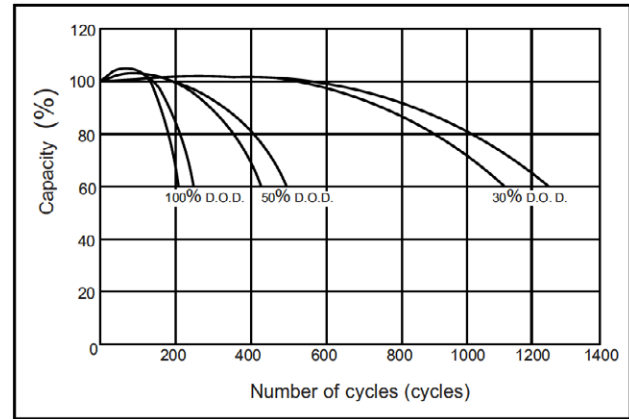
Self-discharge characteristics



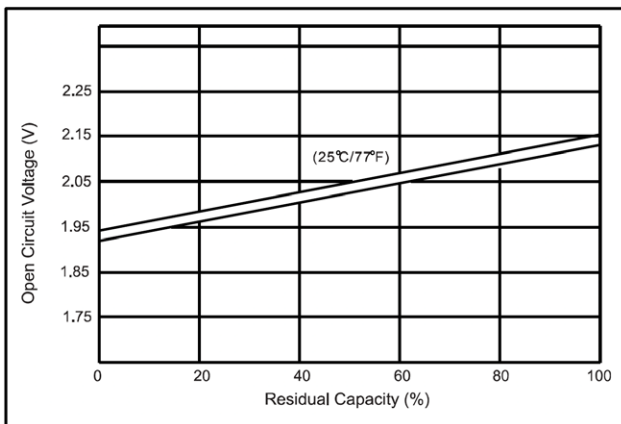
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature

