VRLA AGM battery

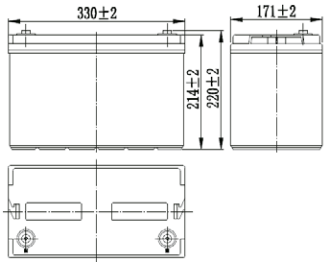
ATP 12-120AH

ATP series is a general Purpose battery. It meets with heavy duty grids, thicker plates, special additives and advanced AGM valve regulated technology, the ATP series battery provides consistent performance and long service life. The new grid design effectively reduces the internal resistance, which provides higher specific energy density and excellent high rate discharge characteristics. It is suitable for telecommunications back-up power and EPS/UPS applications.

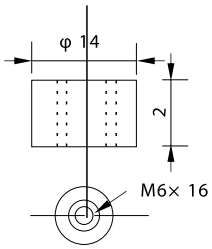
Specifications

Nominal Voltage		12V
Rated capacity (20 hour rate)		120Ah
Dimensions	Length	330±2mm(12.99inch)
	Width	171±2mm(6.73inch)
	Height	214±2mm(8.43inch)
	Total Height	220±2mm(8.66inch)
Approx. Weight		32.7kg(72.1lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	20HR(10.8V)	120Ah
	10HR(10.8V)	115Ah
	3HR(10.8V)	90Ah
	1HR(10.5V)	66Ah
Terminal type		T16A
Interna! resistance (Fully charged,25°C)		Approx.4m 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		34.5A
Maximum discharge current		950A(5 sec.)
Designed floating life(20°C)		10 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)

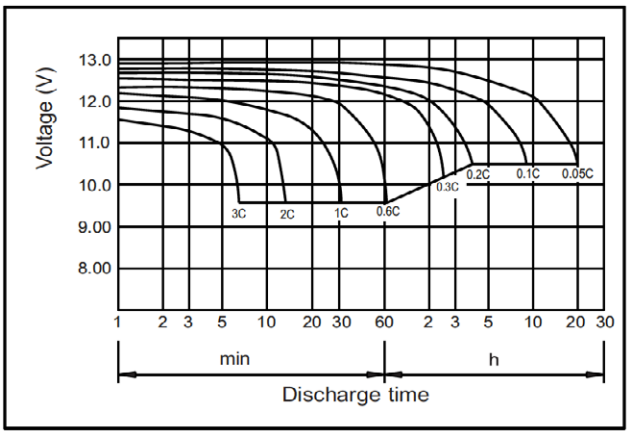
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	Bh	10h	20h
9.60V	254	196	117	72.0	42.5	30.7	24.4	20.9	14.4	11.8	6.28
9.90V	246	191	114	70.8	42.3	30.5	24.3	20.8	14.3	11.8	6.27
10.2V	236	184	112	69.1	41.9	30.3	24.2	20.7	14.2	11.8	6.25
10.5V	226	178	109	66.9	41.3	30.1	24.0	20.5	14.1	11.7	6.21
10.8V	213	168	105	64.7	40.3	29.1	23.3	19.9	13.7	11.6	6.17

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

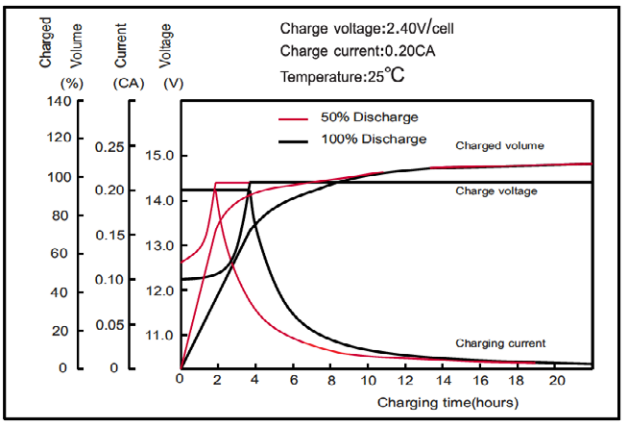
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	Bh	10h	20h
9.60V	2740	2148	1312	820	493	360	288	247	171	142	75.4
9.90V	2659	2095	1286	808	490	358	286	245	170	142	75.2
10.2V	2549	2019	1246	788	485	356	284	243	169	141	75.0
10.5V	2438	1950	1216	762	478	353	282	242	169	140	74.6
10.8V	2302	1847	1172	738	396	342	274	235	162	139	74.0

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

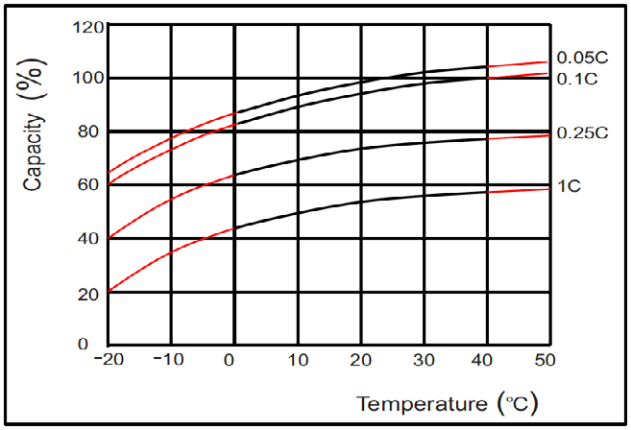
Discharge characteristics(25°C)



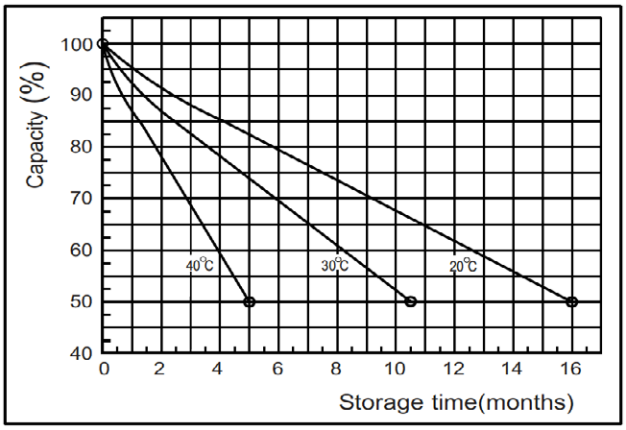
Charging characteristics



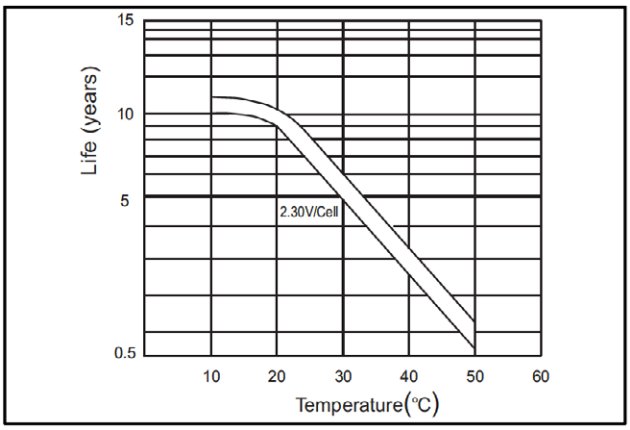
Effect of Temperature on Capacity



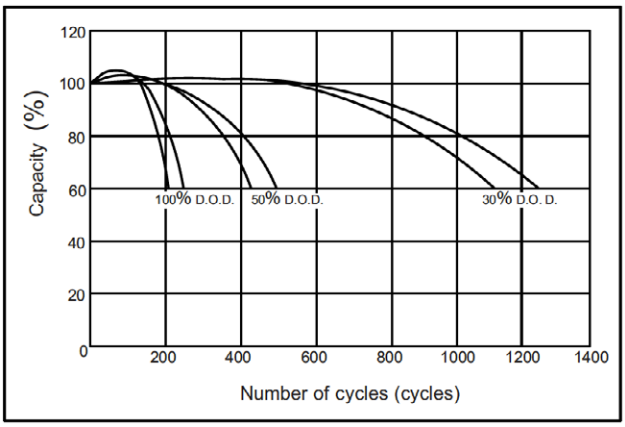
Self-discharge characteristics



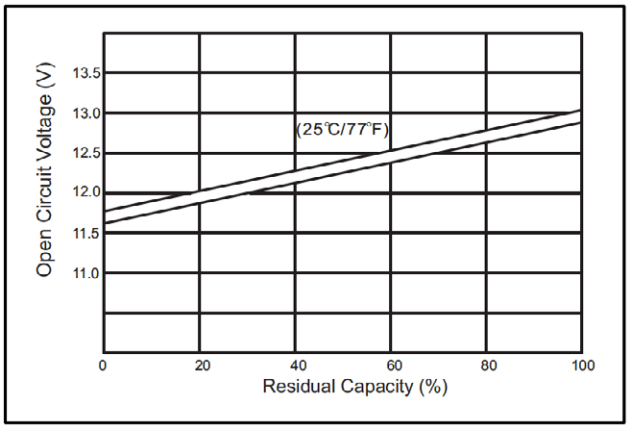
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature