

VRLA AGM battery

ATP HR12-330W-FR

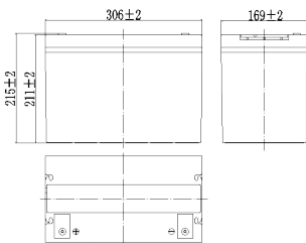


Atlantic Power High Rate series batteries are specially designed for applications that require high power output. With their high-power density and low internal resistance, the HR series are the right choice for your most demanding applications.

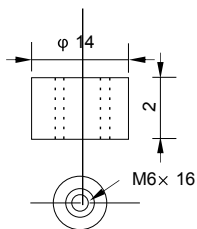
Specifications

Nominal Voltage		12V
Number of cell		6 cells
Rated capacity(15min.rat)		330 Watts/cell
Dimensions	Length	306±2mm(12.05inch)
	Width	169±2mm(6.65inch)
	Height	211±2mm(8.31inch)
	Total Height	215±2mm(8.46inch)
Approx. Weight		28.5kg(62.8lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity(20H R,25°C)		100Ah
Capacity(15min.rate,25°C)		330 Watts/cell
Terminal type		T14
Internal resistance (Fully charged,25°C)		Approx.5m 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		30A
Maximum discharge current		800A(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)

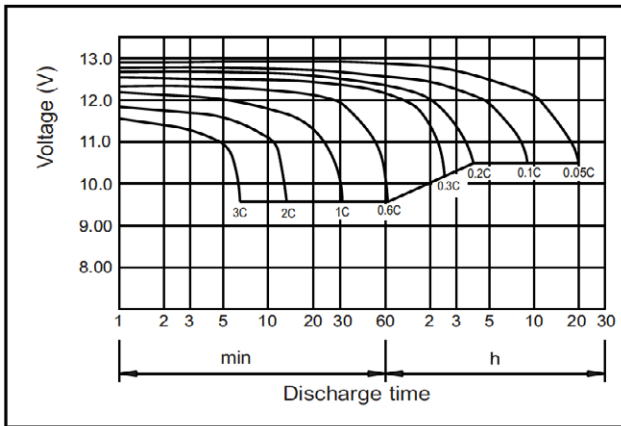
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	215	176	141	99.8	74.4	60.7	34.7	24.9	20.1	17.4	14.9
1.67V/cell	206	171	135	96.6	72.0	59.2	34.4	24.7	19.9	17.3	14.8
1.70V/cell	200	166	132	94.8	70.6	58.2	34.2	24.6	19.8	17.2	14.7
1.75V/cell	192	160	128	92.5	68.9	57.1	33.7	24.4	19.7	17.1	14.6
1.80V/cell	181	151	121	89.1	66.4	55.3	32.8	23.7	19.1	16.6	14.2

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

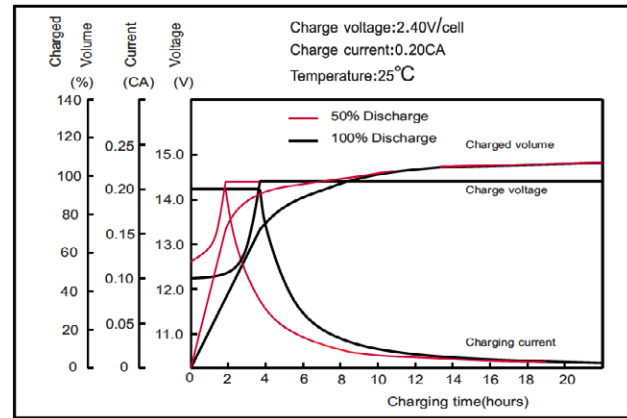
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	405	340	272	193	144	117	67.7	49.1	39.5	34.5	29.5
1.67V/cell	386	330	261	186	139	114	67.1	48.6	39.2	34.2	29.3
1.70V/cell	376	320	256	183	136	112	66.7	48.4	39.0	34.1	29.2
1.75V/cell	360	309	247	179	133	110	65.7	48.1	38.7	33.9	29.0
1.80V/cell	340	292	234	172	128	107	64.0	46.7	37.6	32.8	28.1

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

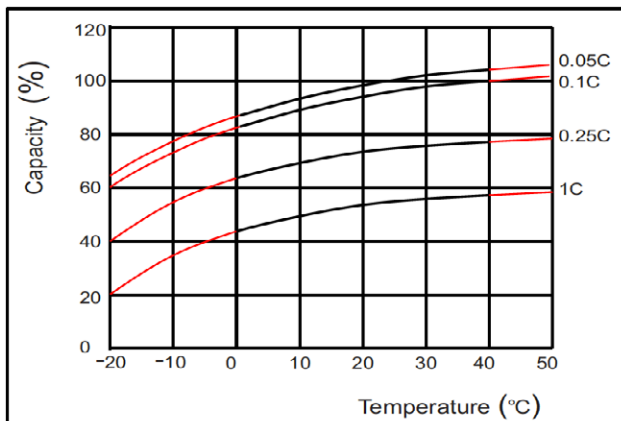
Discharge characteristics(25°C)



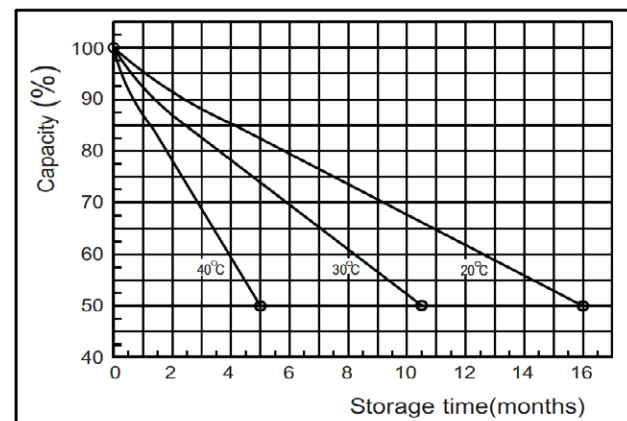
Charging characteristics



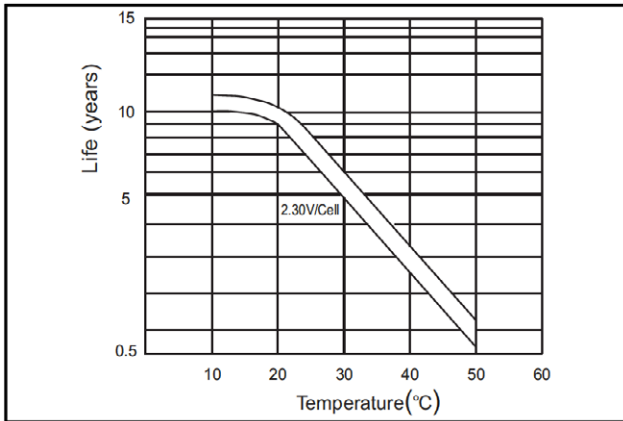
Effect of Temperature on Capacity



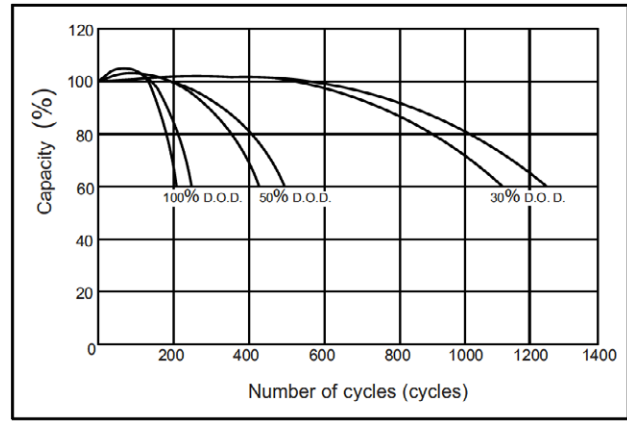
Self-discharge characteristics



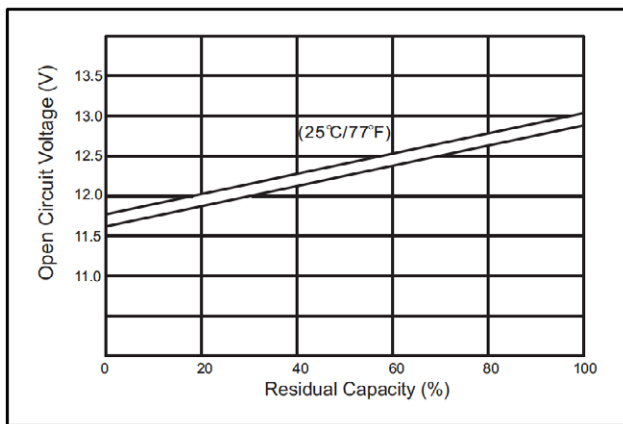
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature

