

VRLA AGM battery

ATP HR12-200W-FR

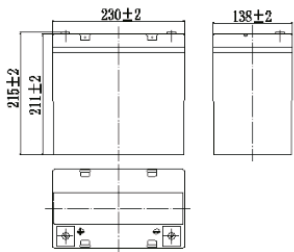


Atlantic Power High Rate series batteries are specially designed for applications that require high power output. With their high-power density and low internal resistance, the HR series are the right choice for your most demanding applications.

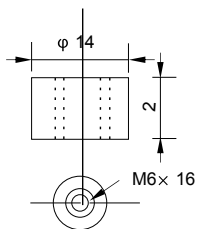
Specifications

Nominal Voltage	12V	
Number of cell	6 cells	
Rated capacity(15min.rat)	200 Watts/cell	
Dimensions	Length	230±2mm(9.06inch)
	Width	138±2mm(5.43inch)
	Height	211±2mm(8.31inch)
	Total Height	215±2mm(8.46inch)
Approx. Weight	17.3kg(38.1lbs)±3%	

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity(20H R,25°C)	55Ah	
Capacity(15min.rate,25°C)	200 Watts/cell	
Terminal type	T14	
Internal resistance (Fully charged,25°C)	Approx.6.5m 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	16.5A	
Maximum discharge current	550A(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)

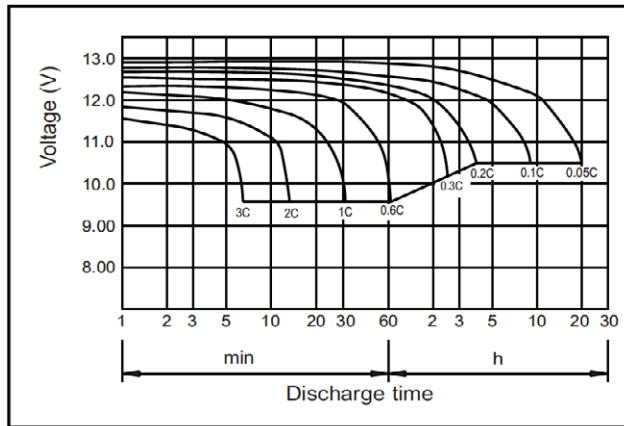
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	131	107	85.5	60.6	45.1	36.8	20.1	14.4	11.6	10.1	8.64
1.67V/cell	125	104	82.1	58.6	43.7	35.9	19.9	14.3	11.5	10.0	8.56
1.70V/cell	122	101	80.4	57.6	42.9	35.4	19.8	14.2	11.5	9.97	8.53
1.75V/cell	116	97.1	77.7	56.2	41.8	34.7	19.5	14.1	11.4	9.90	8.47
1.80V/cell	110	92.0	73.6	54.1	40.3	33.6	19.0	13.7	11.0	9.60	8.22

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

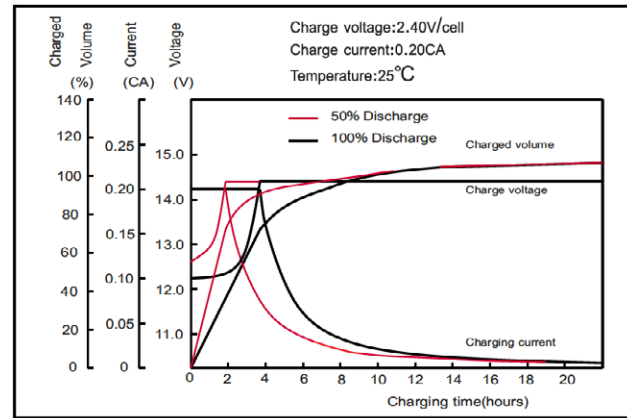
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	246	206	165	117	87.1	71.1	39.2	28.4	22.9	20.0	17.1
1.67V/cell	235	200	158	113	84.3	69.3	38.8	28.2	22.7	19.8	17.0
1.70V/cell	228	194	155	111	82.8	68.2	38.6	28.0	22.6	19.7	16.9
1.75V/cell	219	187	150	108	80.8	66.9	38.0	27.8	22.4	19.6	16.8
1.80V/cell	206	177	142	104	77.8	64.8	37.1	27.0	21.8	19.0	16.3

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

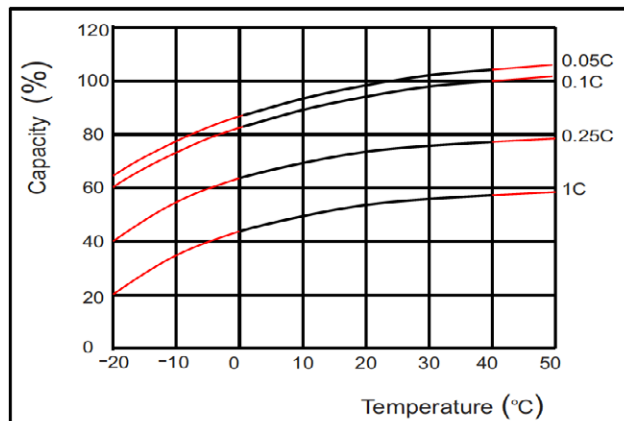
Discharge characteristics(25°C)



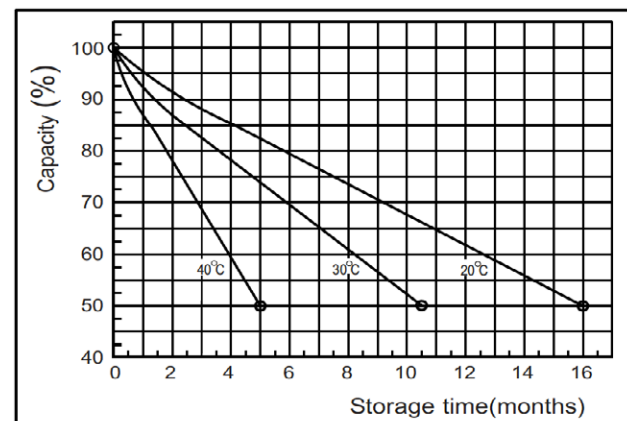
Charging characteristics



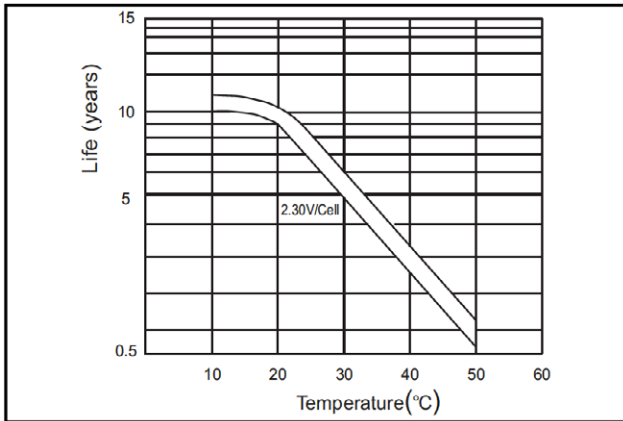
Effect of Temperature on Capacity



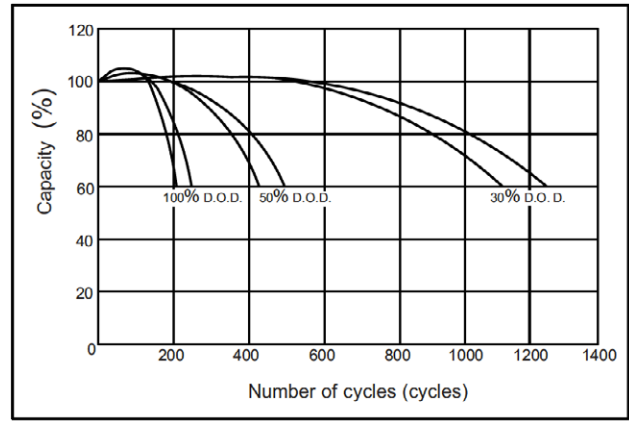
Self-discharge characteristics



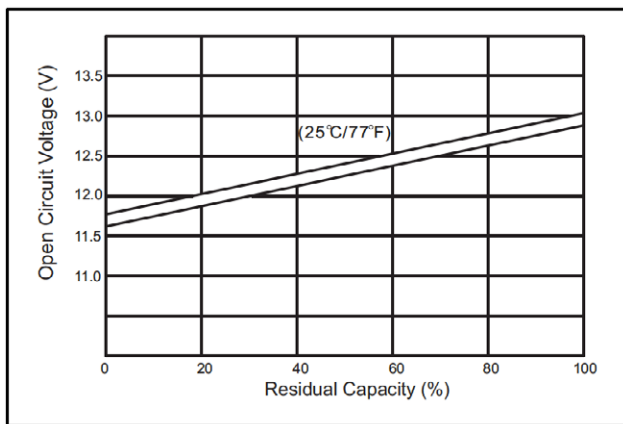
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature

