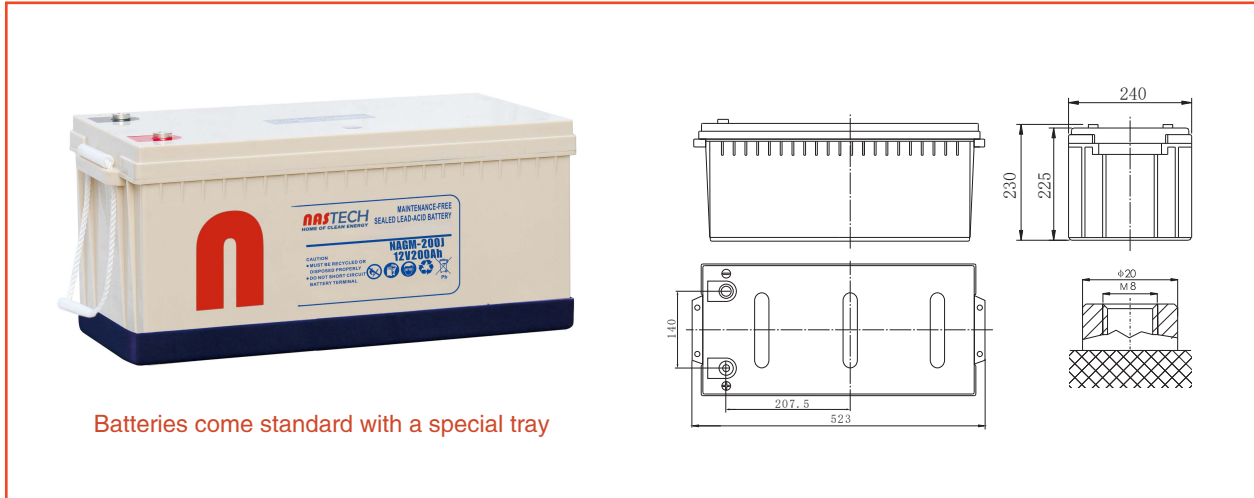


NAGM-12V-200J

Gel Battery Series (AGM)



Batteries come standard with a special tray

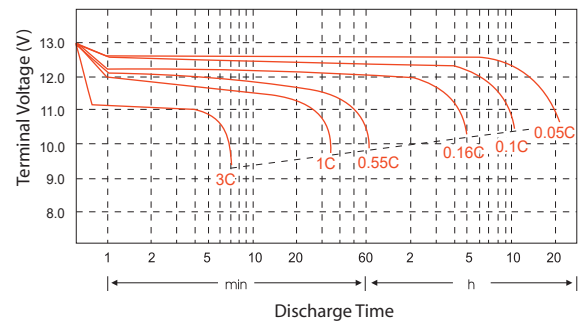
Specifications

Nominal Voltage	12V	
Rated Capacity (10 hour rate)	200Ah	
Dimensions	Total Height (with terminals)	9.06 inches(230mm)
	Height	8.86 inches(225mm)
	Length	20.59 inches(523mm)
	Width	9.45 inches(240mm)
Weight	Approx.128.7 Pound(58.5kg)	

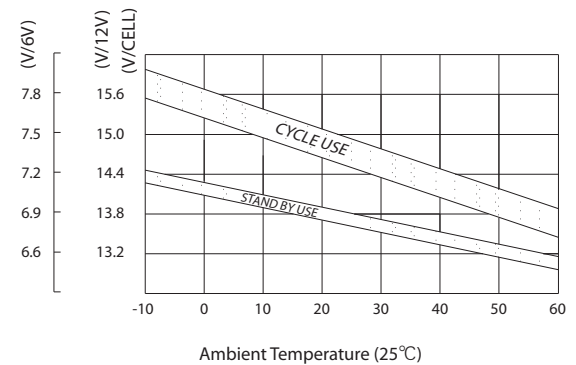
Characteristics

Capacity 77°F (25°C)	10 hour rate (20.0A)	200 Ah
	5 hour rate (32.0A)	160 Ah
	1 hour rate (120.0A)	120 Ah
	15minute rate (328A)	82.0 Ah
Internal Resistance	Full Charged Battery 77°F (25°C)	3.0 mΩ
	104°F (40°C)	102%
Capacity Affected by Temperature (20hour rate)	77°F (25°C)	100%
	32°F (0°C)	85%
	5°F (-15°C)	65%
	Self-Discharge 77°F (25°C)	Capacity after 3 months storage
	Capacity after 6 months storage	81%
	Capacity after 12 months storage	60%
Max. Discharge Current 77°F (25°C)	1333A(5S)	
Terminal	T3	
Charge (Constant Voltage)	Cycle	Initial Charging Current Less than 60A
		Voltage 14.1 V / 77°F (25°C) Equalization temperature compensation coefficient: -24MV/C
	Float	Voltage 13.5V / 77°F (25°C) Compensation coefficient of floating charging temperature: -18MV/C

Discharge Curves 77°F (25°C)



Relationship Between Charge Voltage and Temperature



Constant Current Discharge (Amperes @25°C)

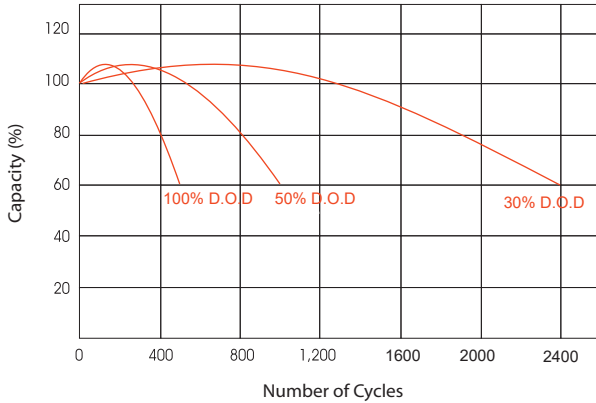
FV/Time	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	401	328	197	133	73.1	52.1	40.7	34.6	23.8	21.1	11.9
1.65	386	315	189	130	70.3	52.0	40.3	34.5	23.5	20.9	11.8
1.70	364	286	177	128	69.2	51.8	39.2	34.2	23.0	20.4	11.5
1.75	317	254	152	127	68.8	51.5	38.5	33.5	22.7	20.2	11.4
1.80	305	244	146	120	66.2	50.0	37.0	32.0	21.8	20.0	11.0
1.85	250	212	134	116	63.6	49.9	35.2	30.8	20.7	19.2	10.5

Constant Power Discharge (Watts Per Cell@25°C)

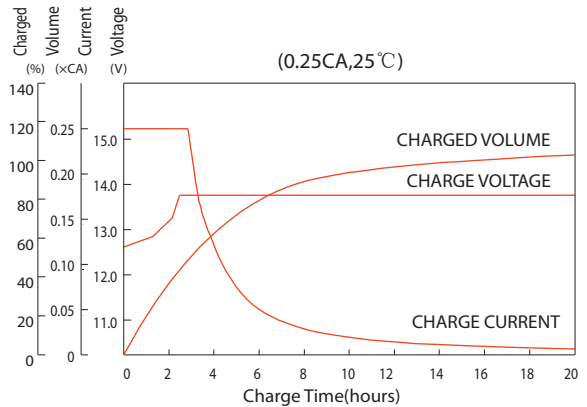
Cut off voltage V/cell	10Min	15Min	30Min	60Min	2H	3H	4H	5H	8H	10H	20H
1.60	697	545	349	278	138	95.8	75.5	63.2	43.5	40.0	22.4
1.65	691	541	343	275	136	94.6	74.9	63.0	43.3	39.8	22.2
1.70	672	529	331	264	134	93.2	74.0	62.6	43.0	39.6	21.4
1.75	629	499	296	260	133	92.8	73.5	62.0	42.5	39.1	21.4
1.80	584	469	281	254	130	92.1	72.9	61.4	41.7	38.3	20.7
1.85	485	410	257	249	124	89.3	69.6	57.2	38.9	36.1	19.7

The operating environment temperature above 40°C should be avoided. After long time storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, NASTECH battery should be fully charged before storage.

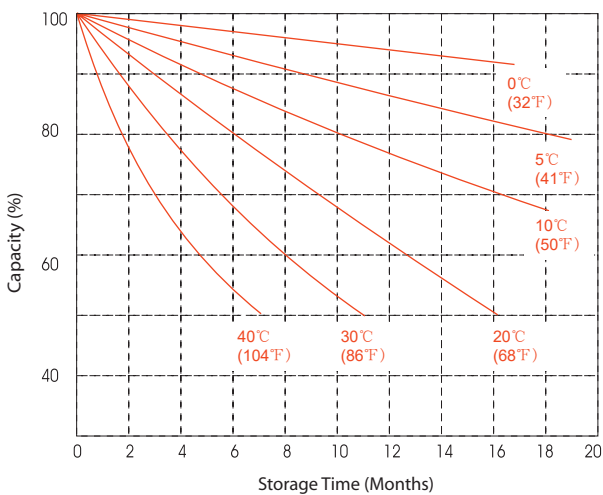
Cycle Service Life in Relation to Depth of Discharge



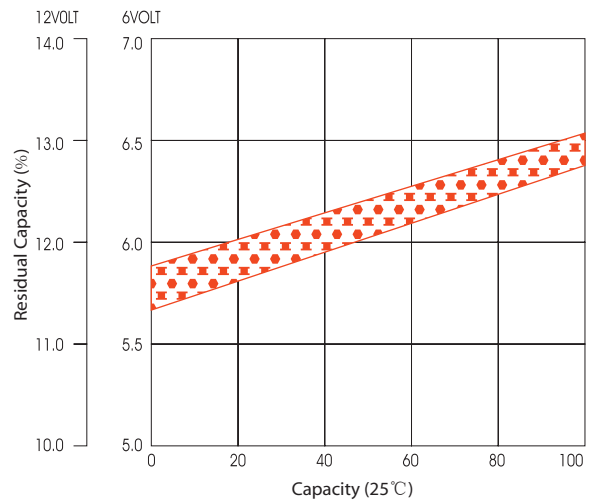
Constant voltage Charge Characteristic



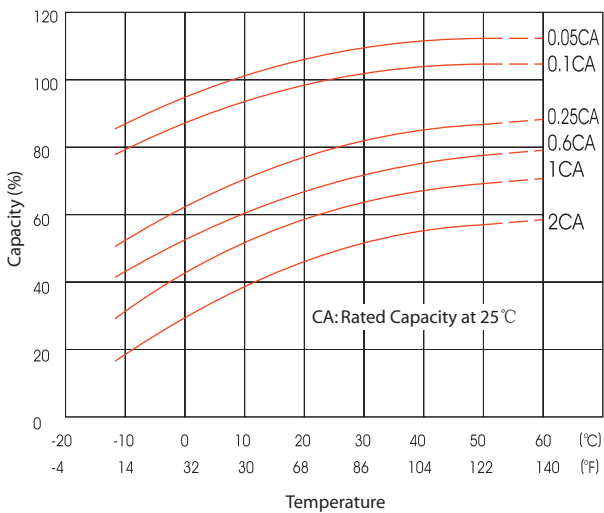
Self-Discharge Characteristics



Relationship of OCV and Residual Capacity % (25°C)



Temperature Effects on Capacity



Temperature Effects Float Life

