

UPN 200 (2V200AH)

(Deep Cycle Premium Gel with Longer Life)



Technical Features of newmax

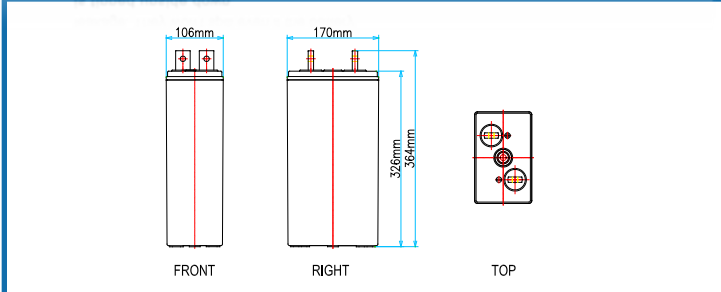
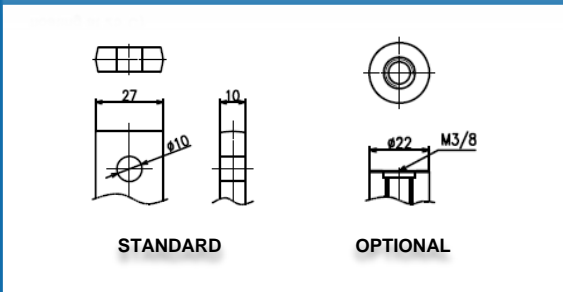
"The Ultra Power of Newmax Lead-Acid Battery"

UPN Series

UPN series is an ultra efficient premium quality UPS/SOLAR system battery series. This innovative and technology intensive product has proven to last up to 60% longer than it's predecessor, the PNGB series. Constant drive for true innovation was the key to the success of our UPN series.

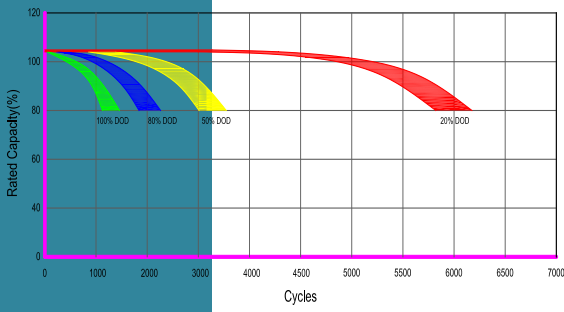
*** The color and the printed specifications of the products are subject to change without prior notice.

- | 01 Long Life | 02 No Need Equalizing Charge | 03 Leak free | 04 Safety |
|---|---|---|--|
| High density, anti-corrosive lead calcium alloy is used to promote longevity and durability. (15 years expected life when floating at 25°C) | The floating voltage of each cell is 2.23 ~ 2.25V at 25°C | Environmentally friendly and perfectly sealed battery. Electrolyte is completely impregnated onto the separator to prevent leakage. They won't spill even if the battery is tipped upside down. | Specially designed anti-explosion filter and safety valves prevent gas leakage when overcharged. |

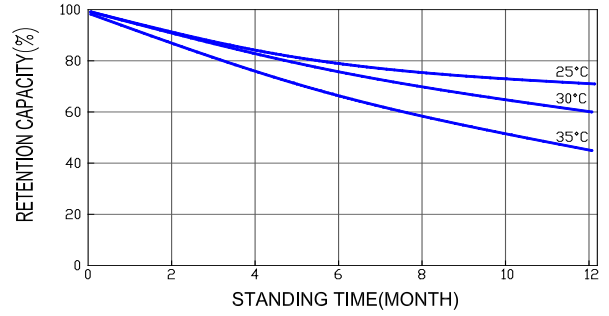


Battery model	UPN 200 (2V200AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	200AH	182AH	166AH	132AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	106(4.17)	170(6.69)	326(12.83)	364(14.33)
Approx. weight (kg/lbs)	13.5kg±5% (29.8lbs)			
Internal resistance (mΩ)	0.9mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	1600 A	Max. discharge current (continuous)		400A
Capacity affected by Temperature (%)	@30°C(86°F)	@25°C(77°F)	@10°C(50°F)	@-10°C(14°F)
	105%	103%	95%	78%
Self discharge (@25°C,77F)	After 1 month 3%	After 3 month 8%	After 6 month 15%	
Max. short duration discharge current (@0.1sec)	2,300A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 80A max.		2.23~2.25V (±3.3mV/°C)	

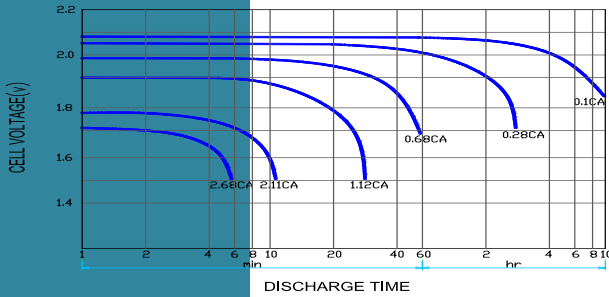
Cycle life vs Depth of Discharge@25°C



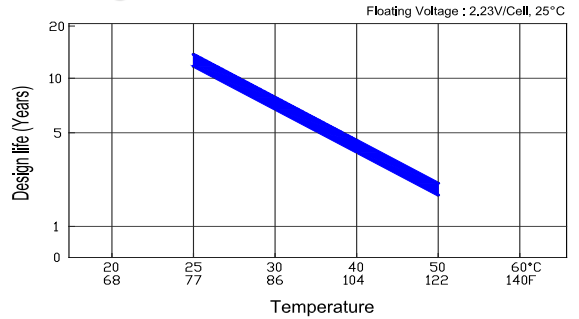
Self discharge



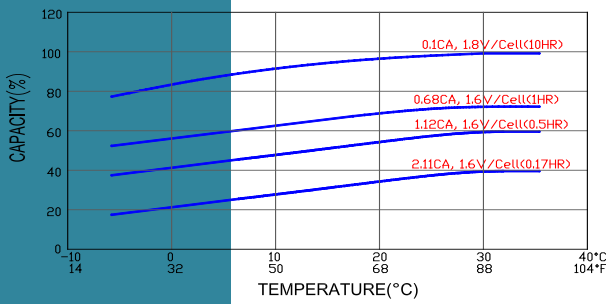
Discharge time vs Current



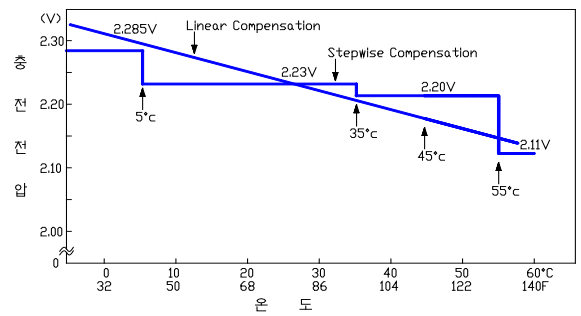
Floating life characteristics



Effect of temperature on capacity



Charging voltage vs Temperature



Constant current discharge ratings – Amperes per cell @ 25°C

V/cell	Minutes						Hours					
	5	10	15	20	30	40	1	3	5	8	10	20
1.90V	204	200	189	176	144	121	103	49.3	32.0	21.7	17.8	9.8
1.85V	274	254	228	207	170	143	115	53.2	34.9	24.1	18.9	10.4
1.80V	361	312	269	238	201	167	129	57.4	38.0	26.0	20.0	11.0
1.75V	430	355	302	262	209	177	135	58.3	39.0	26.7	21.6	11.9
1.70V	472	387	322	277	217	183	139	60.0	40.1	27.0	21.7	11.9
1.65V	519	417	343	294	228	189	143	62.6	40.9	27.7	22.1	12.2
1.60V	574	452	367	313	243	197	149	64.5	42.6	27.7	22.4	12.3

Constant power discharge ratings – Watts per cell @ 25°C

V/cell	Minutes						Hours					
	5	10	15	20	30	40	1	3	5	8	10	20
1.90V	397	388	366	341	283	239	202	97.0	63.1	43.5	35.6	19.6
1.85V	532	493	443	402	335	282	227	105	68.7	48.2	37.7	20.8
1.80V	700	605	522	462	397	330	254	113	74.9	51.9	40.0	22.0
1.75V	834	688	586	509	411	349	265	115	76.8	53.3	43.1	23.7
1.70V	916	751	625	537	428	360	274	118	79.1	53.9	43.4	23.9
1.65V	1,007	809	666	570	450	372	282	123	80.5	55.3	44.3	24.3
1.60V	1,114	878	713	608	478	388	293	127	83.8	55.3	44.8	24.7

