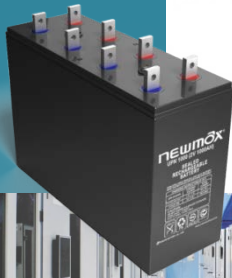


UPN 1000 (2V1000AH)

(Deep Cycle Premium Gel with Longer Life)



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

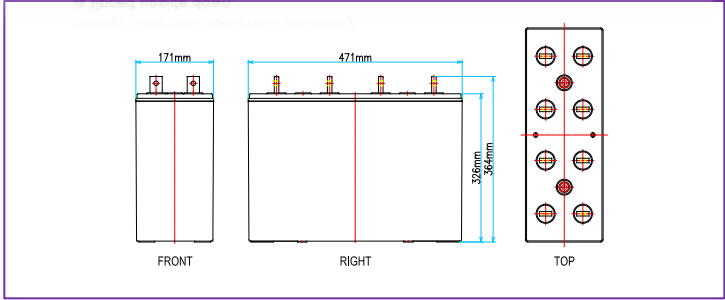
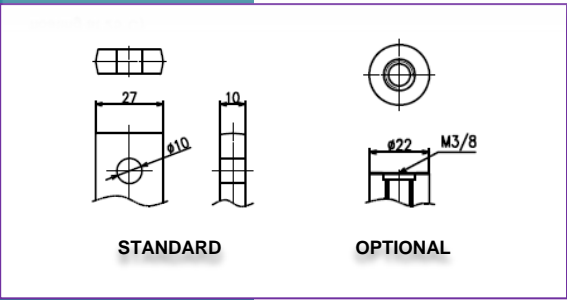
Technical Features of newmax

"The Ultra Power of Newmax Lead-Acid Battery"

UPN Series

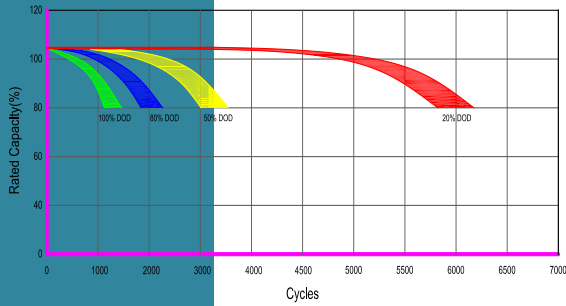
UPN series is an ultra efficient premium quality UPS/SOLAR system battery series. This innovative and technology intensive product has proven to last up to 60% longer than it's predecessor, the PNGB series. Constant drive for true innovation was the key to the success of our UPN series.

- 01 Long Life**
 High density, anti-corrosive lead calcium alloy is used to promote longevity and durability. (15 years expected life when floating at 25°C)
- 02 No Need Equalizing Charge**
 The floating voltage of each cell is 2.23 ~ 2.25V at 25°C
- 03 Leak free**
 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.
- 04 Safety**
 Specially designed anti-explosion filter and safety valves prevent gas leakage when overcharged.

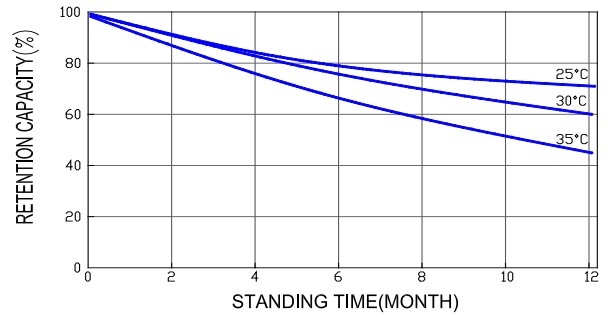


Battery model	UPN 1000 (2V1000AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	1000AH	910AH	830AH	660AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	471(18.54)	171(6.73)	326(12.83)	364(14.33)
Approx. weight (kg/lbs)	65.0kg±5% (143.3 lbs)			
Internal resistance (mΩ)	0.18mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	8,000 A	Max. discharge current (continuous)		2,000A
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)	12,000A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 400A max.		2.23~2.25V (±3.3mV/°C)	

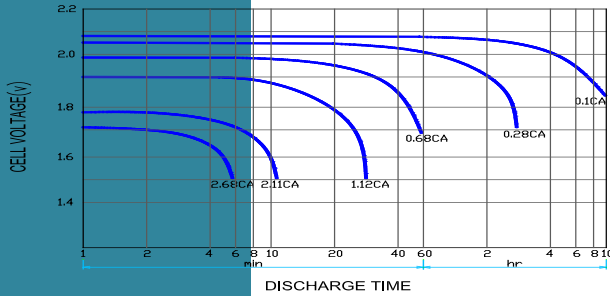
Cycle life vs Depth of Discharge@25°C



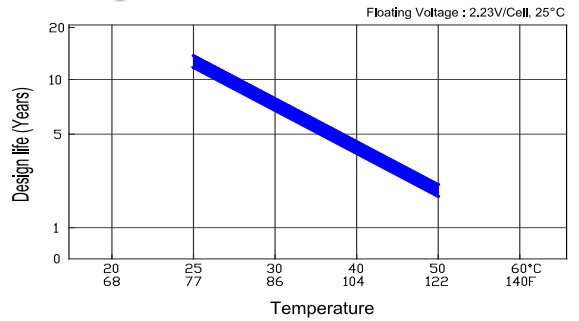
Self discharge



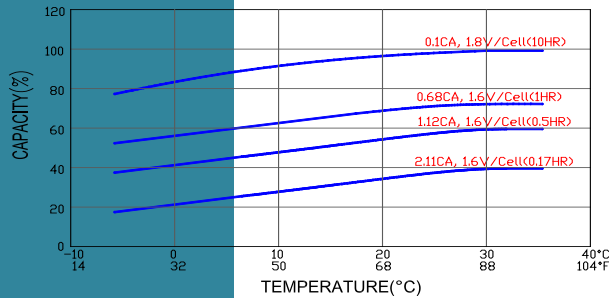
Discharge time vs Current



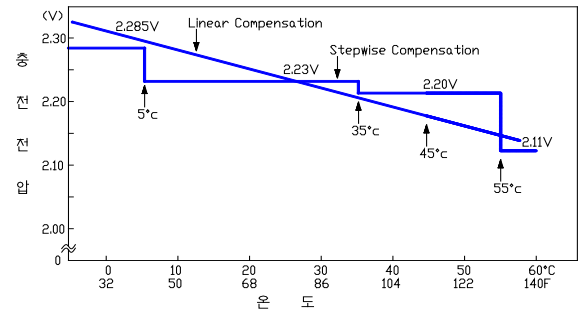
Floating life characteristics



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	1,022	1,001	943	879	719	606	513	246	160	109	89.0	48.9
1.85V	1,370	1,270	1,142	1,035	851	716	575	266	174	121	94.3	51.9
1.80V	1,804	1,560	1,346	1,191	1,007	837	645	287	190	130	100	55.0
1.75V	2,149	1,773	1,511	1,312	1,043	887	673	291	195	133	108	59.3
1.70V	2,361	1,936	1,610	1,383	1,085	915	695	300	201	135	109	59.7
1.65V	2,596	2,085	1,716	1,468	1,142	943	716	313	204	138	111	60.9
1.60V	2,872	2,262	1,837	1,567	1,213	986	745	323	213	138	112	61.6

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	1,983	1,942	1,829	1,705	1,417	1,194	1,011	485	315	217	178	98
1.85V	2,658	2,463	2,215	2,009	1,677	1,411	1,133	524	344	241	189	104
1.80V	3,500	3,026	2,611	2,310	1,984	1,649	1,270	566	374	260	200	110
1.75V	4,169	3,440	2,931	2,545	2,054	1,746	1,326	574	384	267	216	119
1.70V	4,581	3,756	3,123	2,683	2,138	1,802	1,369	591	395	270	217	119
1.65V	5,036	4,045	3,330	2,848	2,249	1,858	1,411	616	402	277	221	122
1.60V	5,572	4,389	3,564	3,041	2,389	1,942	1,467	636	419	277	224	123

