

UPN 600 (2V600AH)

(Deep Cycle Premium Gel with Longer Life)



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

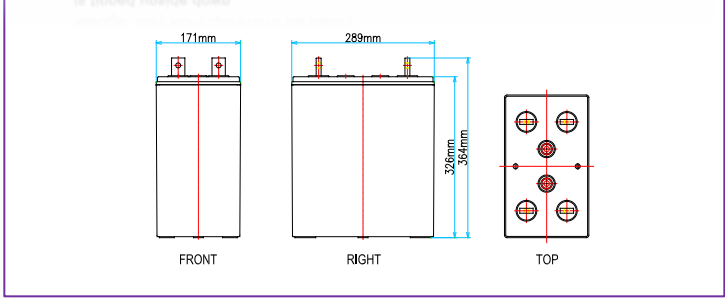
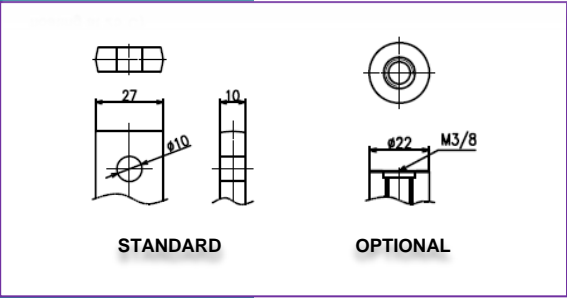
Technical Features of newmax

"The Ultra Power of Newmax Lead-Acid Battery"

UPN Series

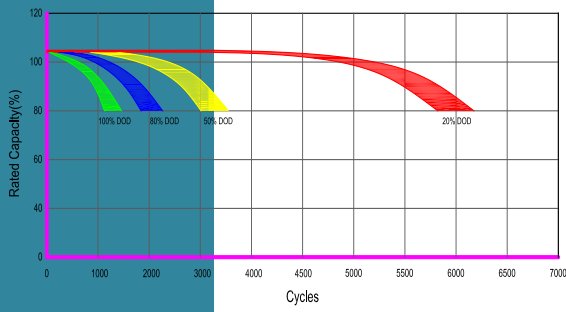
UPN series is an ultra efficient premium quality UPS/SOLAR system battery series. This innovative and technology intensive product has proven to last up to 60% longer than it's predecessor, the PNGB series. Constant drive for true innovation was the key to the success of our UPN series.

- | 01 Long Life | 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. |

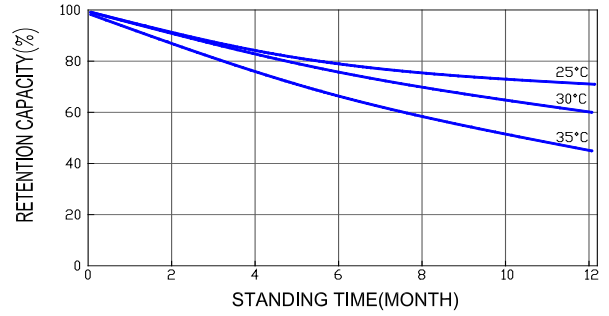


Battery model	UPN 600 (2V600AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	600AH	546AH	498AH	396AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	289(11.38)	171(6.73)	326(12.83)	364(14.33)
Approx. weight (kg/lbs)	38.0kg±5% (83.8 lbs)			
Internal resistance (mΩ)	0.30mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	4,800 A	Max. discharge current (continuous)		1,200A
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)	7,200A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 240A max.		2.23~2.25V (±3.3mV/°C)	

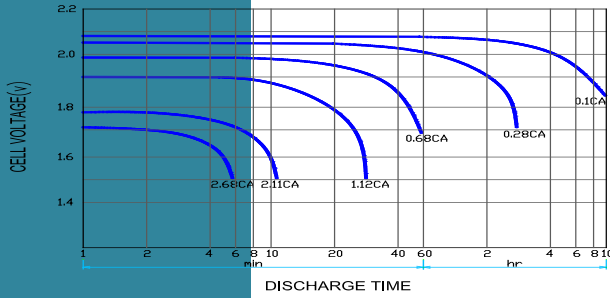
Cycle life vs Depth of Discharge@25°C



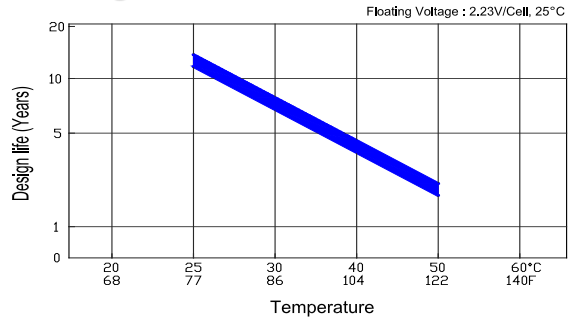
Self discharge



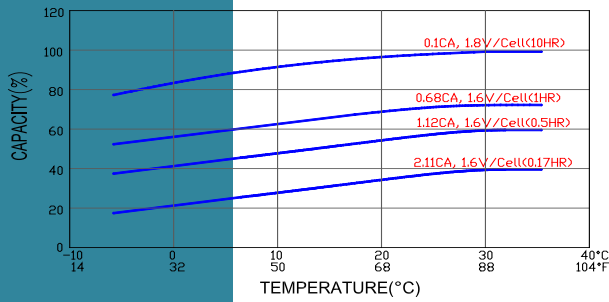
Discharge time vs Current



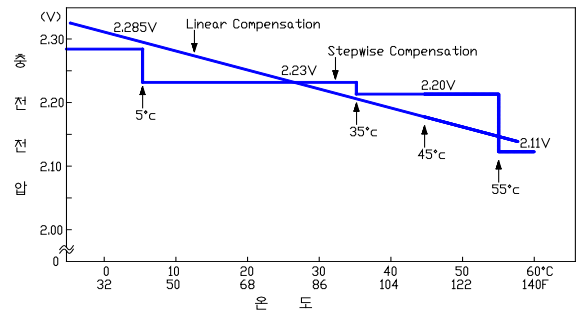
Floating life characteristics



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	613	601	566	527	431	364	308	148	96.1	65.2	53.4	29.4
1.85V	822	762	685	621	511	430	345	160	105	72.3	56.6	31.1
1.80V	1,082	936	808	714	604	502	387	172	114	77.9	60.0	33.0
1.75V	1,289	1,064	906	787	626	532	404	175	117	80.0	64.7	35.6
1.70V	1,417	1,162	966	830	651	549	417	180	120	80.9	65.1	35.8
1.65V	1,558	1,251	1,030	881	685	566	430	188	123	83.0	66.4	36.5
1.60V	1,723	1,357	1,102	940	728	591	447	194	128	83.0	67.2	37.0

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	1,190	1,165	1,097	1,023	850	716	607	291	189	130	107	58.7
1.85V	1,595	1,478	1,329	1,205	1,006	847	680	314	206	145	113	62.3
1.80V	2,100	1,815	1,567	1,386	1,190	989	762	340	225	156	120	66.0
1.75V	2,502	2,064	1,759	1,527	1,232	1,048	796	345	231	160	129	71.1
1.70V	2,749	2,254	1,874	1,610	1,283	1,081	822	355	237	162	130	71.6
1.65V	3,022	2,427	1,998	1,709	1,350	1,115	847	370	241	166	133	73.0
1.60V	3,343	2,633	2,138	1,824	1,433	1,165	880	381	251	166	134	74.0

