

UPN 300 (2V300AH)

(Deep Cycle Premium Gel with Longer Life)



Technical Features of newmax

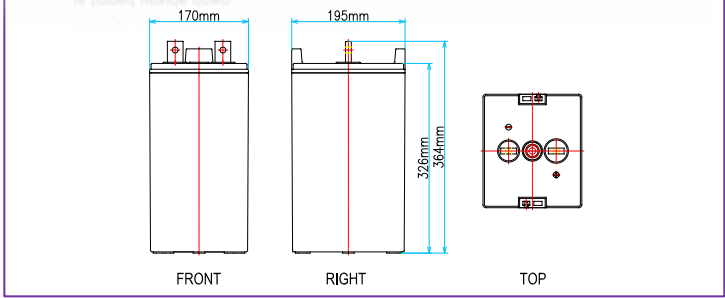
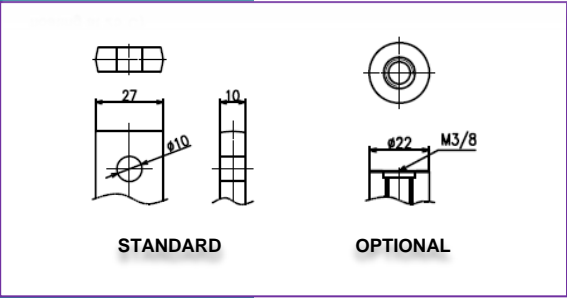
"The Ultra Power of Newmax Lead-Acid Battery"

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.

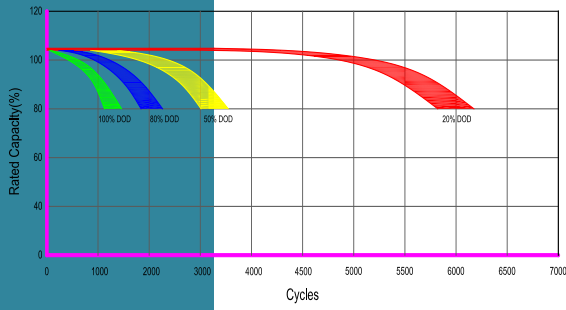
*** The color and the printed specifications of the products are subject to change without prior notice.

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.

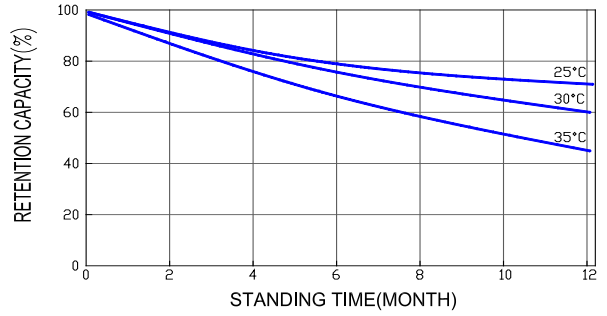


Battery model	UPN 300 (2V300AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	300AH	273AH	249AH	198AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	195(7.68)	170(6.69)	326(12.83)	364(14.33)
Approx. weight (kg/lbs)	20.5kg±5% (45.2 lbs)			
Internal resistance (mΩ)	0.60mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	2400 A	Max. discharge current (continuous)		600A
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)	3,600A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 120A max.		2.23~2.25V (±3.3mV/°C)	

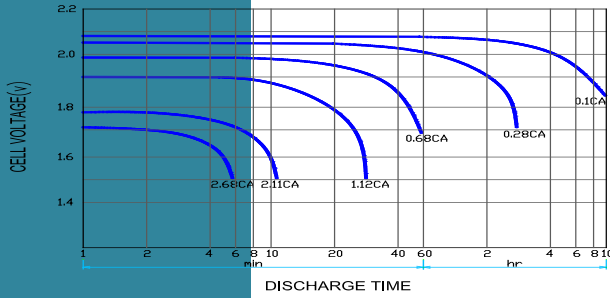
Cycle life vs Depth of Discharge@25°C



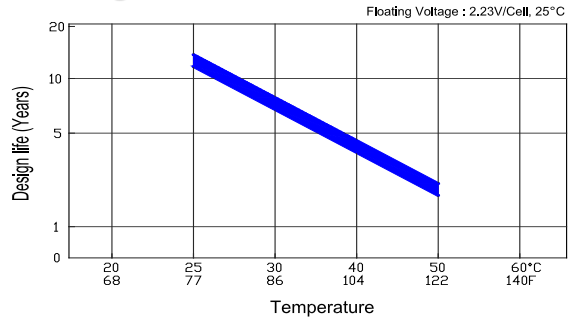
Self discharge



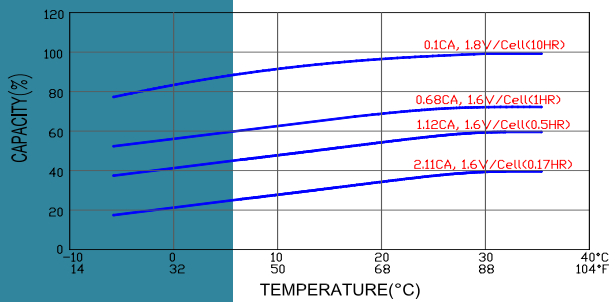
Discharge time vs Current



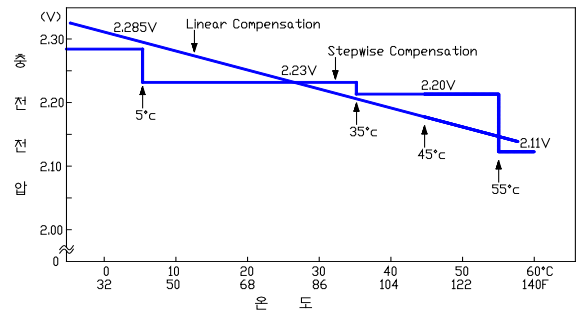
Floating life characteristics



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	307	300	283	264	216	182	154	73.9	48.0	32.6	26.7	14.7
1.85V	411	381	343	311	255	215	173	79.8	52.3	36.2	28.3	15.6
1.80V	541	468	404	357	302	251	193	86.2	57.0	38.9	30.0	16.5
1.75V	645	532	453	394	313	266	202	87.4	58.5	40.0	32.3	17.8
1.70V	708	581	483	415	326	274	209	90.0	60.2	40.4	32.6	17.9
1.65V	779	626	515	440	343	283	215	93.8	61.3	41.5	33.2	18.3
1.60V	862	679	551	470	364	296	223	96.8	63.8	41.5	33.6	18.5

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	595	583	549	512	425	358	303	146	94.6	65.2	53.4	29.4
1.85V	797	739	665	603	503	423	340	157	103	72.3	56.6	31.1
1.80V	1,050	908	783	693	595	495	381	170	112	77.9	60.0	33.0
1.75V	1,251	1,032	879	764	616	524	398	172	115	80.0	64.7	35.6
1.70V	1,374	1,127	937	805	641	541	411	177	119	80.9	65.1	35.8
1.65V	1,511	1,214	999	855	675	557	423	185	121	83.0	66.4	36.5
1.60V	1,671	1,317	1,069	912	717	583	440	191	126	83.0	67.2	37.0

