

UPN 700 (2V700AH)

(Deep Cycle Premium Gel with Longer Life)



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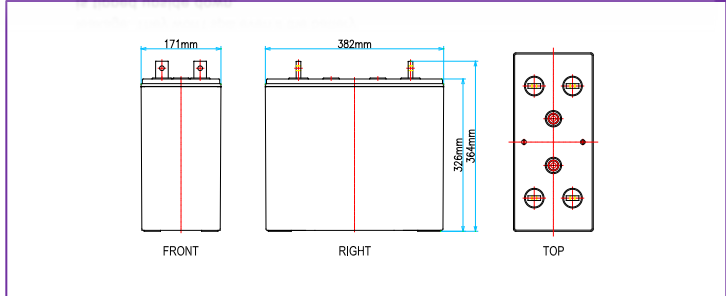
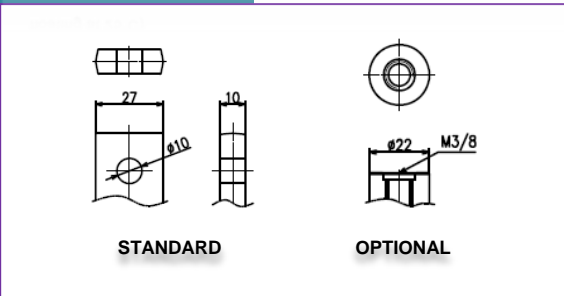
Technical Features of newmax

"The Ultra Power of Newmax Lead-Acid Battery"

UPN Series

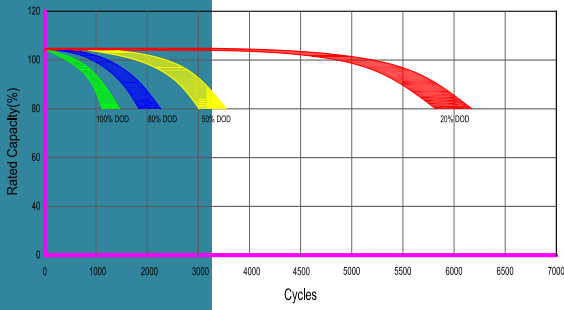
UPN series is an ultra efficient premium quality UPS/SOLAR system battery series. This innovative and technology intensive product has proven to last up to 60% longer than it's predecessor, the PNGB series. Constant drive for true innovation was the key to the success of our UPN series.

- | 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. |

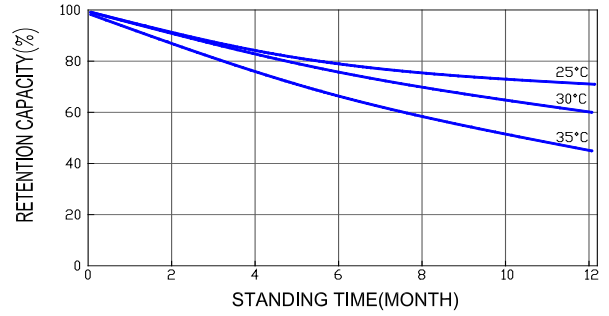


Battery model	UPN 700 (2V700AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	700AH	637AH	581AH	462AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	382(15.04)	171(6.73)	326(12.83)	364(14.33)
Approx. weight (kg/lbs)	45.5kg±5% (100.3 lbs)			
Internal resistance (mΩ)	0.26mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	5,600 A	Max. discharge current (continuous)		1,400A
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)	8,400A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 280A max.		2.23~2.25V (±3.3mV/°C)	

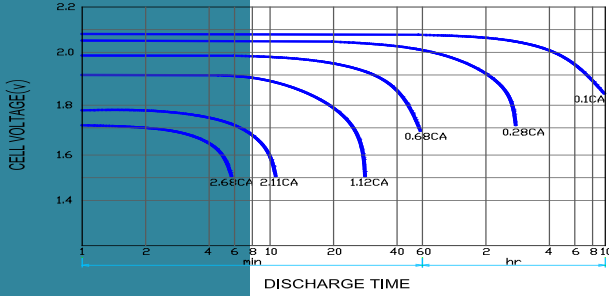
Cycle life vs Depth of Discharge@25°C



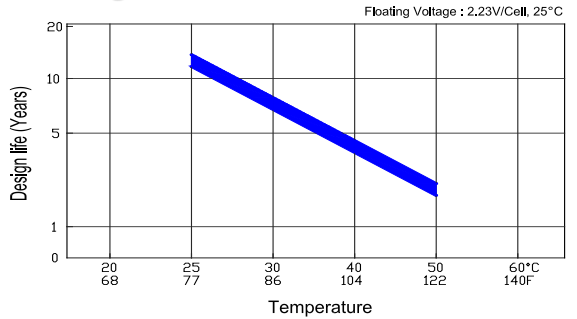
Self discharge



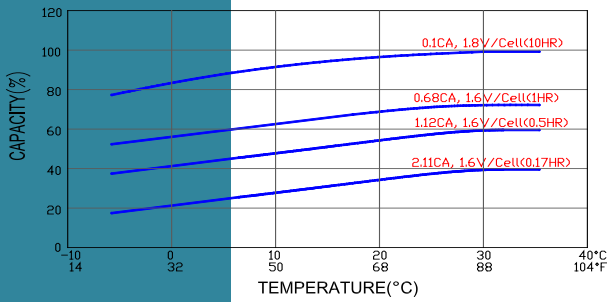
Discharge time vs Current



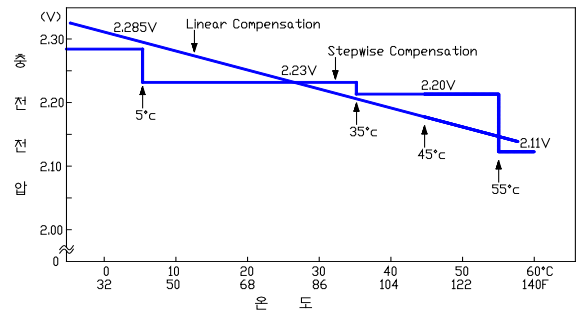
Floating life characteristics



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	716	701	660	615	503	424	359	172	112	76.1	62.3	34.3
1.85V	959	889	799	725	596	501	403	186	122	84.4	66.0	36.3
1.80V	1,263	1,092	942	834	705	586	451	201	133	90.9	70.0	38.5
1.75V	1,504	1,241	1,058	918	730	621	471	204	137	93.3	75.5	41.5
1.70V	1,653	1,355	1,127	968	760	640	487	210	140	94.3	76.0	41.8
1.65V	1,817	1,460	1,202	1,028	799	660	501	219	143	96.8	77.4	42.6
1.60V	2,010	1,584	1,286	1,097	849	690	521	226	149	96.8	78.4	43.1

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	1,388	1,359	1,280	1,194	992	836	708	340	221	152	125	68.5
1.85V	1,860	1,724	1,551	1,406	1,174	988	793	367	241	169	132	72.6
1.80V	2,450	2,118	1,828	1,617	1,389	1,154	889	396	262	182	140	77.0
1.75V	2,919	2,408	2,052	1,782	1,438	1,223	928	402	269	187	151	83.0
1.70V	3,207	2,629	2,186	1,878	1,496	1,262	958	414	277	189	152	83.6
1.65V	3,525	2,832	2,331	1,994	1,575	1,301	988	431	282	194	155	85.2
1.60V	3,900	3,072	2,494	2,129	1,672	1,359	1,027	445	293	194	157	86.3

