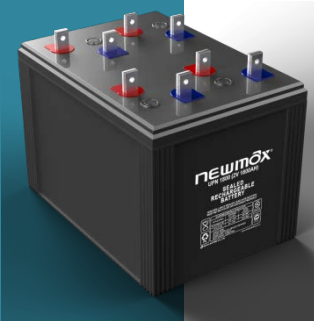


UPN 1800 (2V1800AH)

(Deep Cycle Premium Gel with Longer Life)



Technical Features of newmax

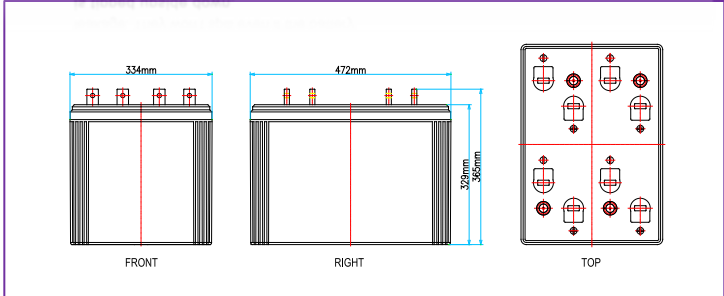
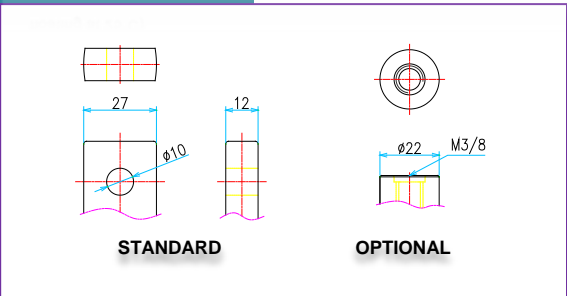
"The Ultra Power of Newmax Lead-Acid Battery"

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.

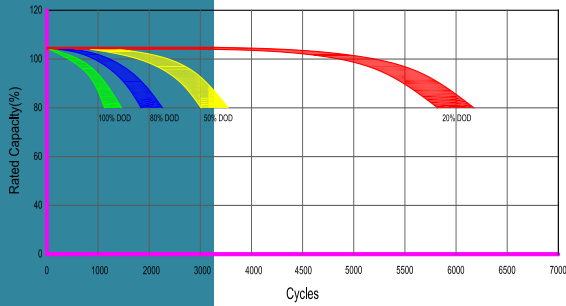
*** The color and the printed specifications of the products are subject to change without prior notice.

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.

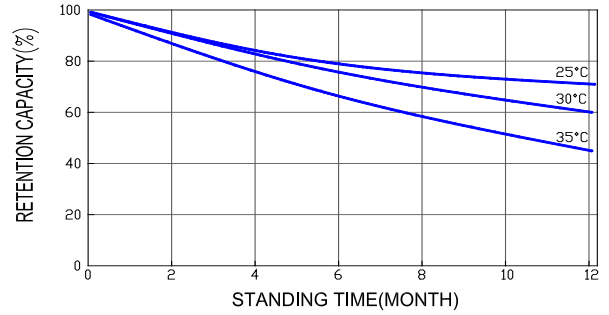


Battery model	UPN 1800 (2V1800AH / 10 HOUR RATE)			
Rated Capacity (Ah, @20°C)	10HR (1.80VPC)	5HR (1.70VPC)	3HR (1.67VPC)	1HR (1.60VPC)
	1800AH	1638AH	1494AH	1188AH
Dimensions (mm/inch)	Length	Width	Height	Total height
	472(18.58)	333(13.11)	340(13.39)	372(14.65)
Approx. weight (kg/lbs)	118.0kg±5% (260.1 lbs)			
Internal resistance (mΩ)	0.10mΩ±10% (@25°C, 77°F)			
Max. discharge current (@5sec)	14,400 A	Max. discharge current (continuous)		3,600A
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)	21,600A ±10%			
Charging method (@25°C)	Cycle use		Floating use	
	2.40~2.50V (±5.5mV/°C) / 720A max.		2.23~2.25V (±3.3mV/°C)	

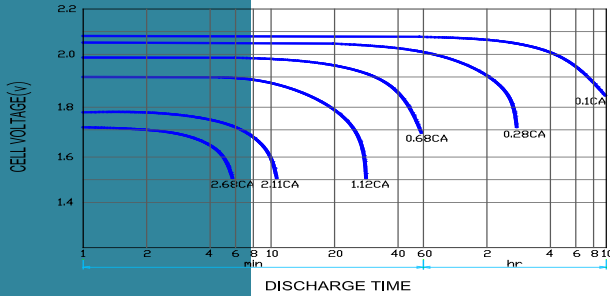
Cycle life vs Depth of Discharge@25°C



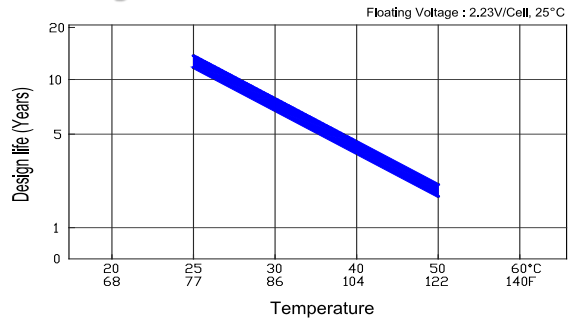
Self discharge



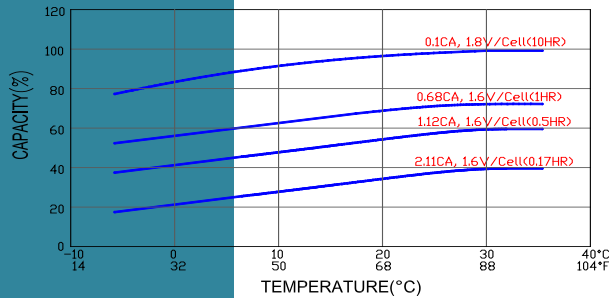
Discharge time vs Current



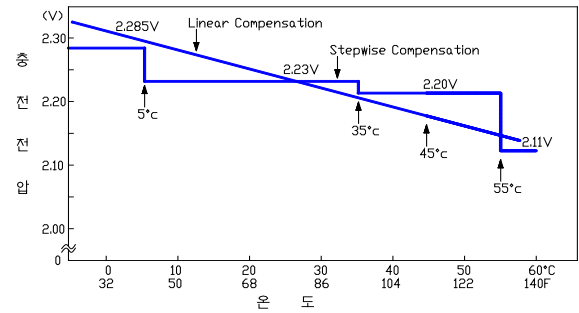
Floating life characteristics



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	1,840	1,802	1,697	1,582	1,294	1,091	924	443	288	196	160	88.1
1.85V	2,466	2,285	2,055	1,864	1,532	1,289	1,035	479	314	217	170	93.4
1.80V	3,247	2,807	2,423	2,143	1,813	1,506	1,160	517	342	234	180	99.0
1.75V	3,868	3,191	2,719	2,362	1,877	1,596	1,211	525	351	240	194	107
1.70V	4,250	3,485	2,898	2,490	1,953	1,647	1,251	540	361	243	195	107
1.65V	4,673	3,753	3,090	2,643	2,055	1,698	1,289	563	368	249	199	110
1.60V	5,169	4,072	3,306	2,821	2,183	1,774	1,340	581	383	249	202	111

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	3,570	3,495	3,292	3,069	2,550	2,149	1,820	873	568	391	320	176
1.85V	4,784	4,433	3,987	3,616	3,018	2,540	2,040	943	619	434	340	187
1.80V	6,300	5,446	4,700	4,158	3,571	2,968	2,286	1,019	674	467	360	198
1.75V	7,505	6,191	5,276	4,581	3,697	3,144	2,387	1,034	692	480	388	213
1.70V	8,246	6,761	5,621	4,830	3,848	3,244	2,465	1,064	712	485	391	215
1.65V	9,065	7,281	5,994	5,127	4,049	3,345	2,540	1,109	724	498	398	219
1.60V	10,029	7,900	6,414	5,473	4,300	3,496	2,641	1,144	754	498	403	222

