

UPS 12 SS 2200 E AGM VRLA
Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

Design for Standby Power Applications

【Design Life】

Up to 10 Years in Standby Service at 25°C
Eurobat (20°C) : 10-12 years, Long Life

【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)
Discharge : -15°C ~ 50°C (5°F~122°F)
Charge: -15°C ~ 40°C (5°F~104°F)
Storage: -15°C ~ 40°C (5°F~104°F)

【Float Charging Voltage】

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

【Equalization Charging Voltage】

14.0 ~ 14.4 VDC/Unit at 25°C (77°F)

【Self Discharge】

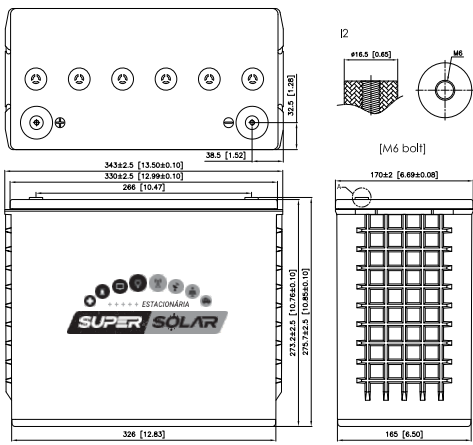
Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);
Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).



Specification

Design according with IEC 60896-21/22:2004

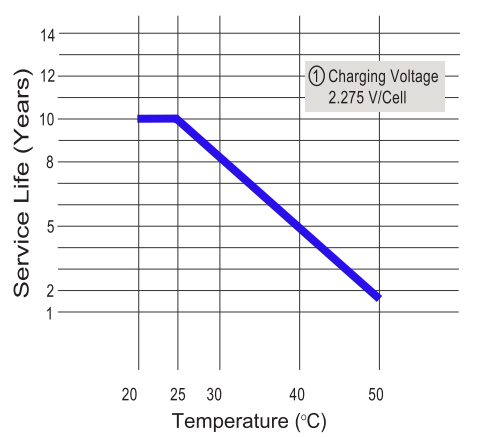
Nominal Voltage	12V (6 cells per unit)		
Nominal Capacity	220Ah@15min-rate to 1.67V per cell @25°C (77°F)		
Weight	Approx. 47.20 Kg (104.03 lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 2.40 mΩ		
Short Circuit Current	3722A		
Maximum Charge Current	62A		
Terminal types	I2 thread lead alloy terminal to accept M6 bolt		
Terminal hardware Torque	138.6 Kgf-cm / 120.3 Lbf-in / 13.58 N-m		
Container Material	Flame Retardant Polypropylene (UL 94-V0)		
Dimensions	Length (L)	343.0±2.5 mm	13.50±0.10 inch
	Width (W)	170.0±2.0 mm	6.69±0.08 inch
	Container Height (h)	273.2±2.5 mm	10.76±0.10 inch
	Overall Height (H)	275.7±2.5 mm	10.85±0.10 inch



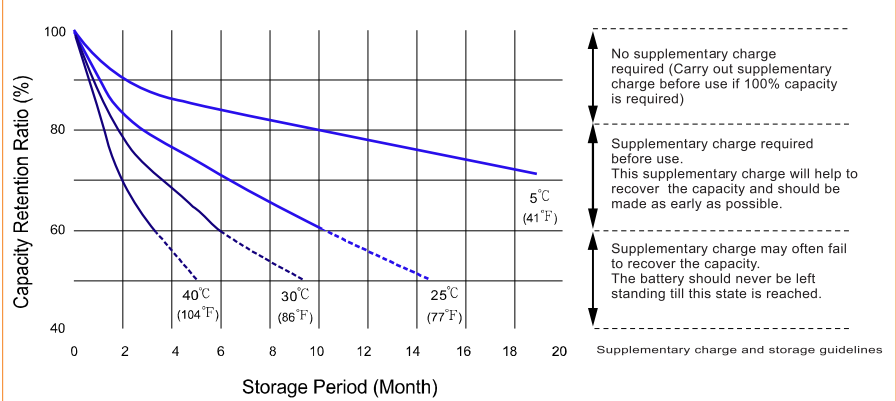
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)												
F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	766	641	601	571	504	458	349	283	206	147	116	81.7
1.67V	660	585	543	511	466	420	326	273	200	144	114	79.8
1.70V	622	545	512	486	448	398	315	267	196	142	113	78.3
1.75V	553	485	465	449	398	356	293	252	188	138	110	78.2
1.80V	494	443	409	383	344	315	270	229	175	131	106	75.6
1.85V	437	360	339	322	298	280	239	201	158	120	97.9	71.1

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)												
F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	7070	6088	5774	5529	5280	4692	3770	3108	2304	1681	1344	966
1.67V	6439	5680	5542	5432	4894	4387	3720	2983	2249	1654	1329	959
1.70V	6090	5494	5406	5336	4692	4262	3540	2918	2222	1642	1325	957
1.75V	5579	5208	4994	4825	4311	3969	3282	2742	2135	1592	1293	944
1.80V	5235	4660	4427	4246	3894	3639	2956	2515	2017	1522	1247	916
1.85V	4134	3765	3715	3674	3470	3120	2576	2257	1864	1414	1163	867

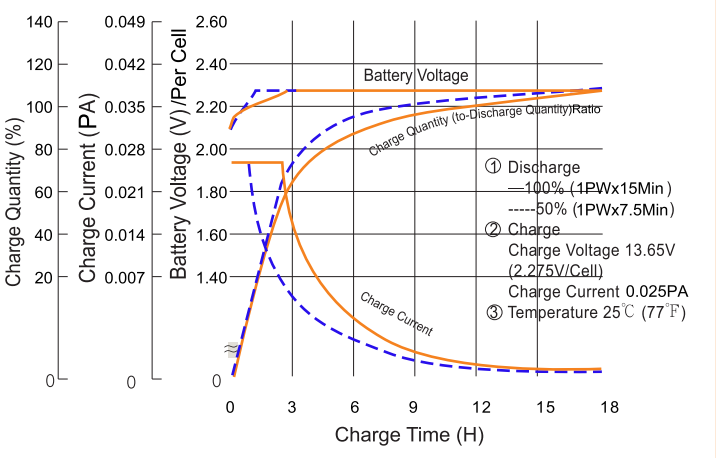
Trickle (or Float) Service Life



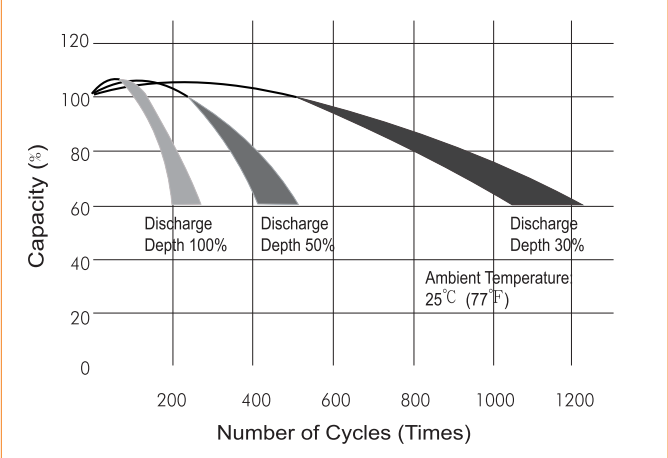
Capacity Retention Characteristic



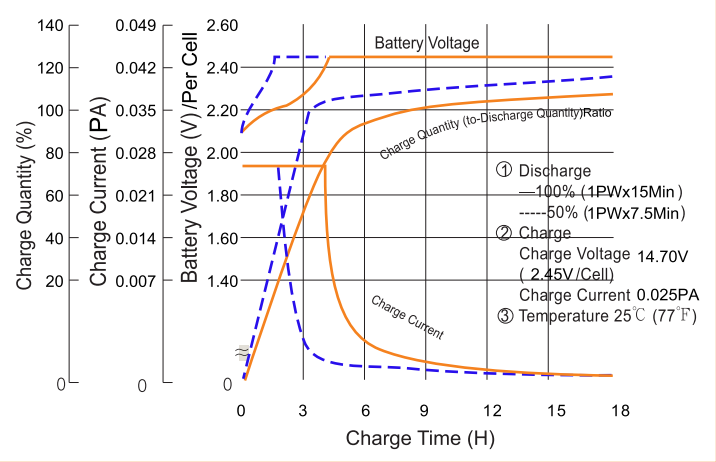
Battery Voltage and Charge Time for Standby Use



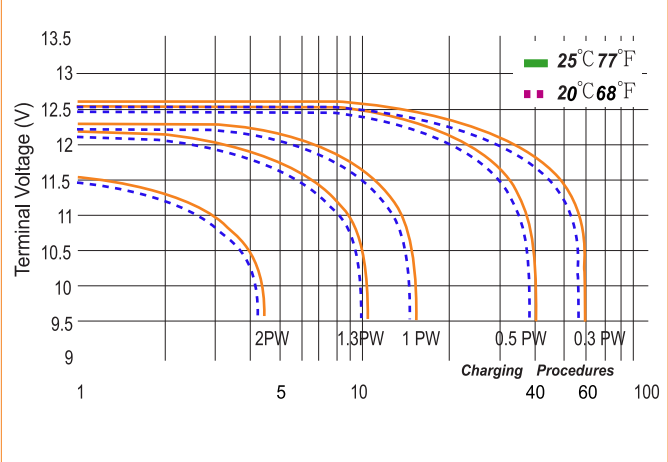
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.1PA
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Power(W)	0.1P>(W)	0.1P≤(W)<0.25P	0.25P≤(W)<1.0P	(W)≥1.0P