



PR121000 is a general purpose battery with 5 years life in standby service, or more than 260 cycles at 100% D.O.D by cyclic use. As with all PROSTAR batteries, all PR models are rechargeable, highly efficient, leak proof and maintenance free.

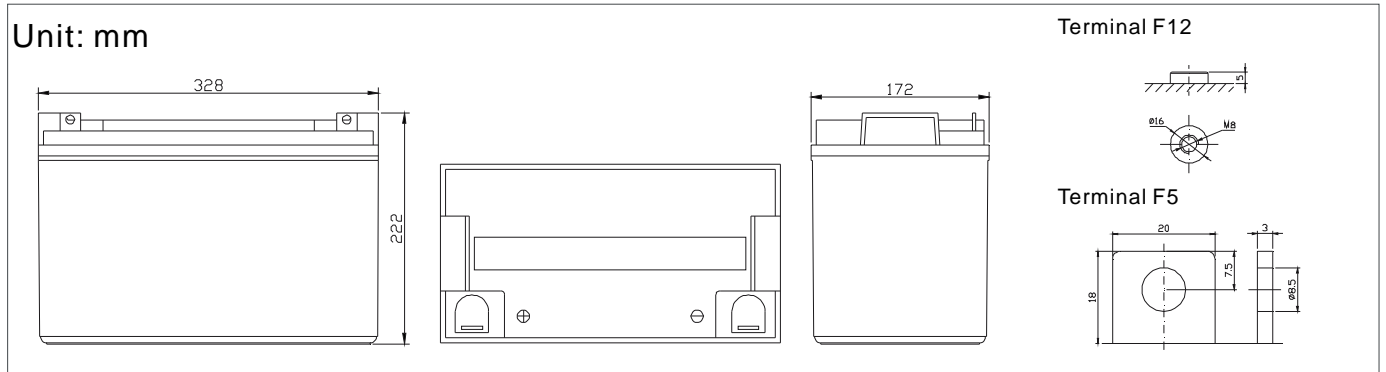


## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100.0Ah@20hr-rate to 1.75V per cell @25?
Weight	Approx.30Kg
Max. Discharge Current	500A(5 sec)
Internal Resistance A	Approx. 5m?
Operating Temperature Range	Discharge: -20? ~60? Charge: 0? ~50? Storage: -20? ~60?
Normal Operating Temperature Range	25? ±5?
Float charging Voltage	13.6 to 13.8VDC/unit Average at 25?
Recommended Maximum Charging Current Limit	30A 14.4 to 15.0VDC/unit Average at 25?
Equalization and Cycle Service	
Self Discharge	PROSTAR batteries can be stored for more than 6 months at 25? . Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Terminal F5/F12
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V2 can be available upon request



## Dimensions



## Constant Current Discharge Characteristics Unit: A(25? )

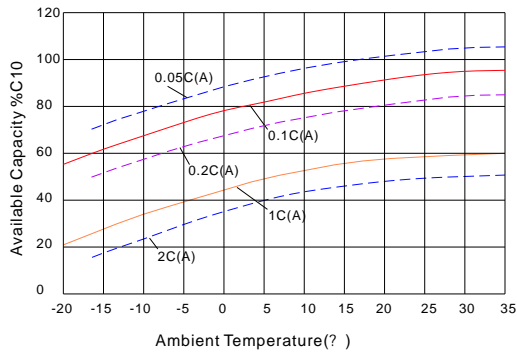
F.V/Time	5M N	10M N	15M N	30M N	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	374	368	195	115	65 0	39 9	26 1	21 6	17 0	12 3	10 4	5 5
10.0V	364	355	191	113	64 7	39 6	26 0	21 5	16 9	12 2	10 3	5 4
10.2V	343	246	188	112	64 1	39 3	25 8	21 4	16 8	12 1	10 2	5 3
10.5V	308	227	179	109	63 5	39 0	25 7	21 2	16 6	12 0	10 1	5 2
10.8V	278	207	165	105	62 0	38 3	25 0	20 7	16 3	11 8	10 0	5 1
11.1V	242	185	148	98	58 9	36 6	23 9	19 7	15 6	11 3	9 7	4 8

## Constant Power Discharge Characteristics Unit: W(25? )

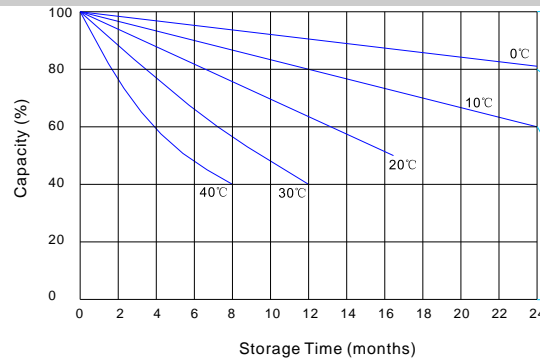
F.V/Time	5M N	10M N	15M N	30M N	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	671	490	361	216	124	76 5	50 2	41 6	32 8	23 8	19 5	10 3
10.0V	657	468	354	214	123	76 2	580 1	41 5	32 6	23 7	19 3	10 2
10.2V	620	453	349	211	122	75 5	49 8	41 3	32 5	23 5	19 2	10 1
10.5V	558	418	333	206	121	74 8	49 5	41 0	32 2	23 3	19 0	10 0
10.8V	502	380	306	197	118	73 7	48 3	39 9	31 7	22 8	18 8	9 9
11.1V	434	337	273	185	112	70 3	45 9	38 0	30 1	22 0	18 2	9 5

All mentioned values are average values

### Temperature effects curve



### Storage characteristic



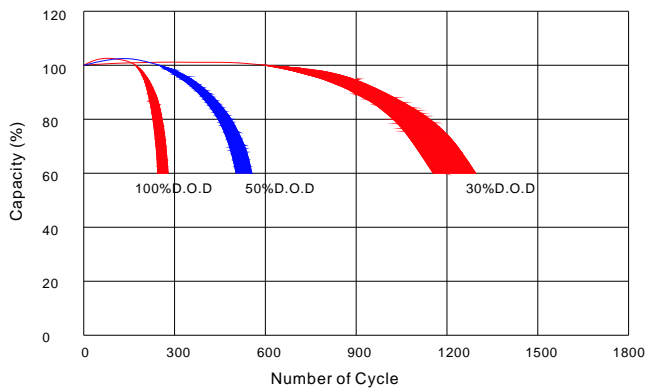
Supplementary charge required (Carry out supplementary y charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary y charge will help to recover the capacity and should be made as early as possible.

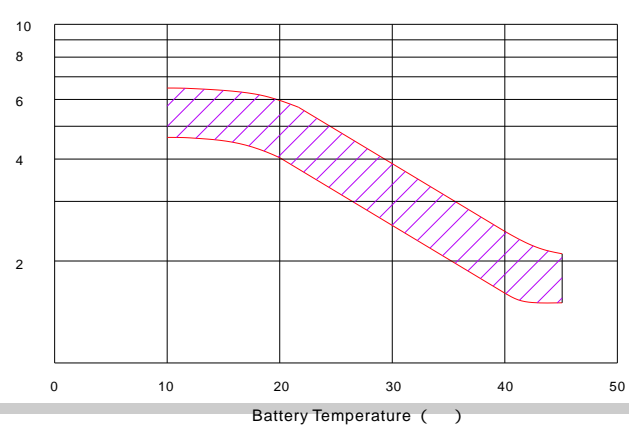
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary y charge and storage guidelines

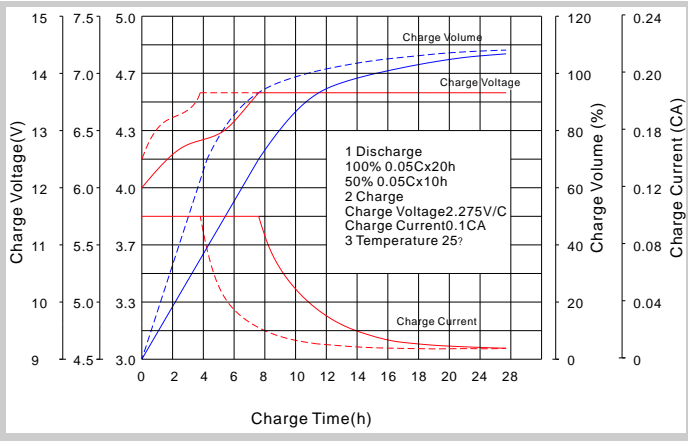
### Life characteristics of cyclic use



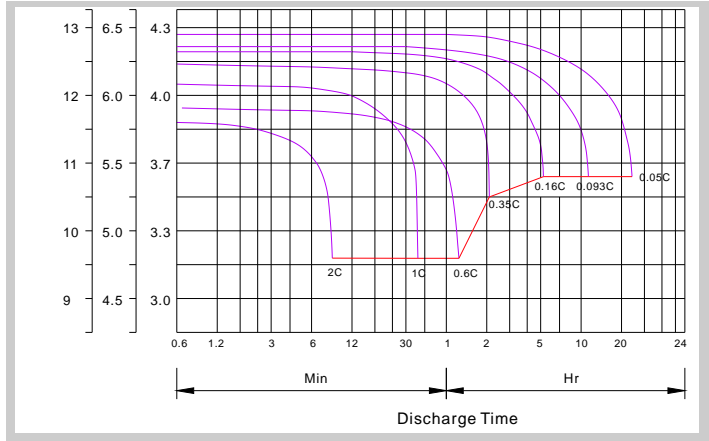
### Effect of temperature on long term float life



### Charge characteristic Curve for standby use



### Discharge characteristic curve



### Charging Procedures

Application	Charge Voltage (V)			Max.Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°	14.7	14.4~15.0	0.3C
Standby	25°	13.7	13.6~13.8	0.3C

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A)<0.20C	0.20C<(A)<1.0C	(A)>1.0C

Charge the batteries at least once every six months, if they are stored at 25° .

Charging Method:

Constant Voltage	2.25~2.50V, 5-11h, Max. Current 0.1CA
Constant Current	0.1CAx5h
Fast	0.3CAx1.7h

### Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Us	25°	7.35	7.25~7.45	0.3C
Standby	25°	6.85	6.8~6.9	0.3C