PROSTAR®

PR1270

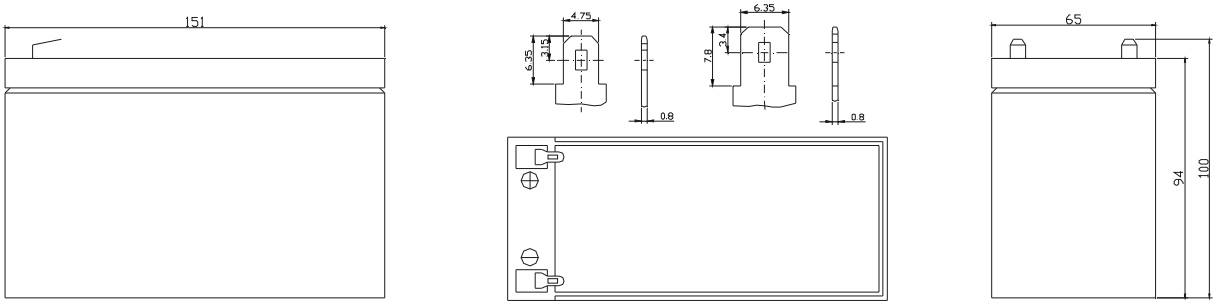
PR1270 is a general purpose battery with 5 years life in standby service, or more than 260 cycles at 100% D.O.D by cyclic use. As with all PROSTAR batteries, all PR models are rechargeable, highly efficient, leak proof and maintenance free.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	7.0Ah@20hr-rate to 1.75V per cell @25?
Weight	Approx.2.15Kg
Max. Discharge Current	70A(5 sec)
Internal Resistance A	Approx. 40m?
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	2.1A
Equalization and Cycle Service	14.4 to 15.0VDC/unit Average at 25?
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	Faston Tab 187(F1)/Faston Tab 250(F2)
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V2 can be available upon request

Dimensions

Unit: mm



Constant Current Discharge Characteristics Unit: A(25?)

F.V/Time	5M IN	10M IN	15M IN	30M IN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	29 1	19 4	14 9	8 21	4 86	2 91	1 79	1 47	1 18	0 87	0 69	0 39
10.0V	27 2	18 1	14 0	8 09	4 83	2 89	1 79	1 46	1 18	0 87	0 68	0 37
10.2V	25 7	17 6	13 7	8 02	4 80	2 88	1 78	1 46	1 17	0 87	0 67	0 36
10.5V	23 2	16 4	13 0	7 84	4 73	2 85	1 77	1 45	1 16	0 87	0 67	0 35
10.8V	20 8	15 3	12 3	7 65	4 66	2 80	1 76	1 44	1 16	0 86	0 65	0 34
11.1V	18 3	14 2	11 6	7 46	4 59	2 76	1 74	1 44	1 15	0 86	0 64	0 33

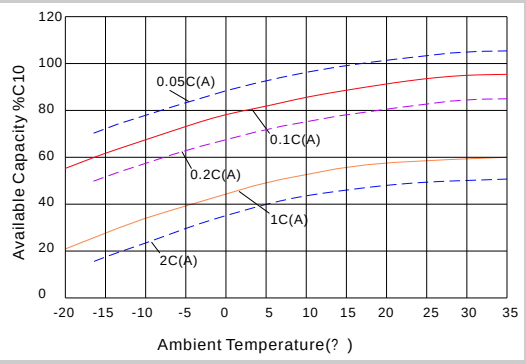
Constant Power Discharge Characteristics Unit: W(25?)

F.V/Time	5M IN	10M IN	15M IN	30M IN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	56 0	36 4	29 6	16 4	9 71	5 82	3 58	2 93	2 78	1 74	1 37	0 76
10.0V	52 5	35 0	28 1	16 2	9 68	5 78	3 57	2 92	2 76	1 74	1 35	0 74
10.2V	51 5	34 0	27 4	16 1	9 66	5 77	3 56	2 92	2 75	1 73	1 34	0 72
10.5V	46 5	32 6	26 0	15 7	9 50	5 68	3 54	2 90	2 74	1 72	1 32	1 69
10.8V	41 6	30 5	24 6	15 3	9 34	5 60	3 51	2 88	2 74	1 72	1 30	0 67
11.1V	36 6	28 4	23 1	14 9	9 18	5 52	3 49	2 86	2 73	1 72	1 28	0 65

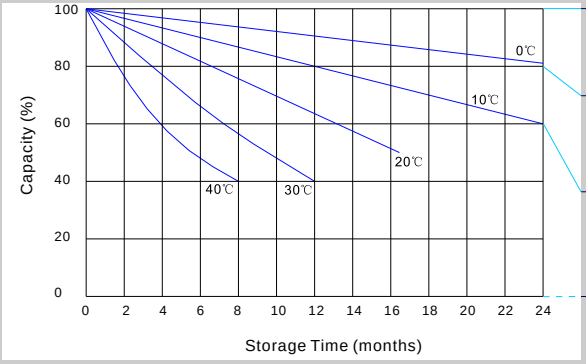
All mentioned values are average values

PR1270 (12V7.0AH)

Temperature effects curve



Storage characteristic



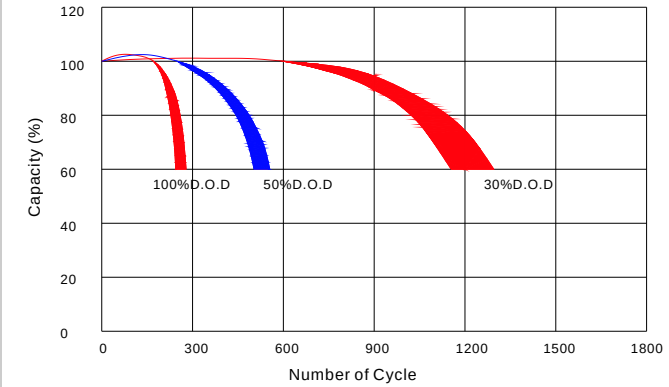
Supplementar y charge required (Carr y out supplementar y charge before use if 100% capacity is requires)

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

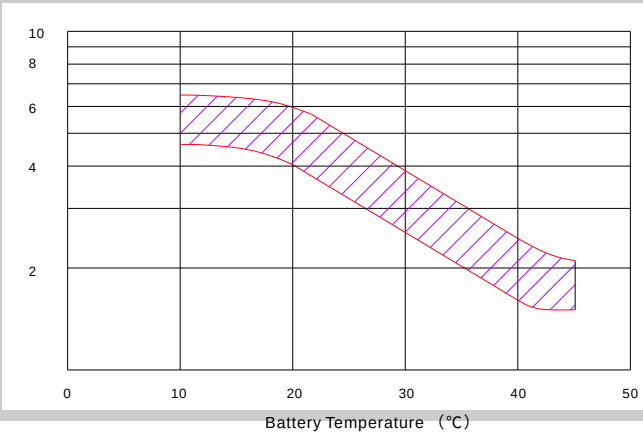
Supplementar y charge may often fail to recover the capacity.
The batter y should never be left standing till this state is reached

Supplementar y charge and storage guidelines

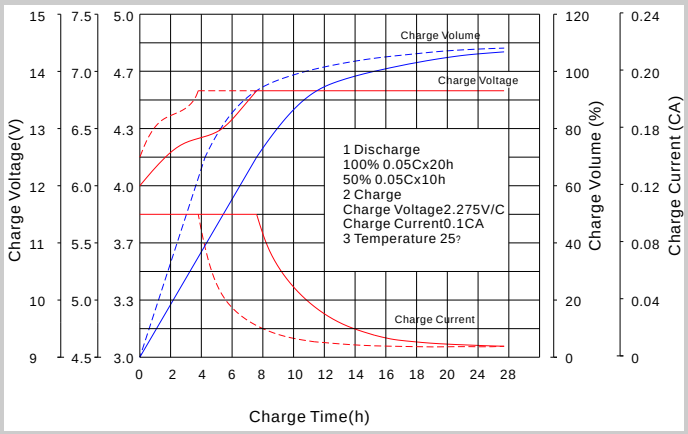
Life characteristics of cyclic use



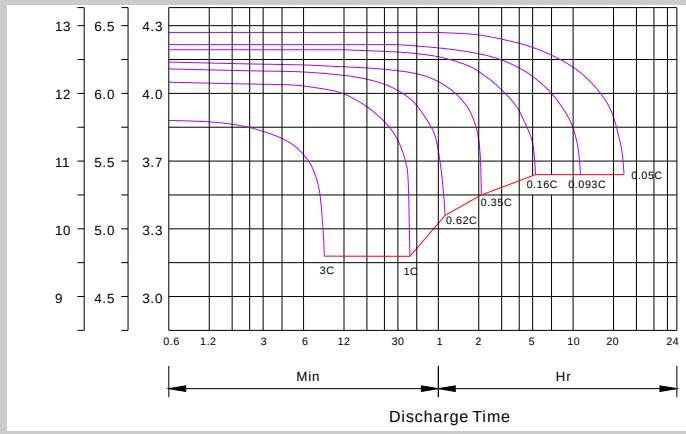
Effect of temperature on long term float life



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	14.4~15.0V,24h,Max. Current 0.3CA
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