

STRIDENTTM

BATTERIES

GP12-100 12V 100Ah(20hr)

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore maintenance-free and leak proof. Batteries should be used in an upright position only.



Battery Construction

Component	Positive Plate	Negative Plate	Container	Cover	Safety Value	Terminal	Separator	Electrolyte
Raw Material	Lead Dioxide	Lead	ABS	ABS	Rubber	Copper	Fibreglass	Sulfuric Acid

General Features

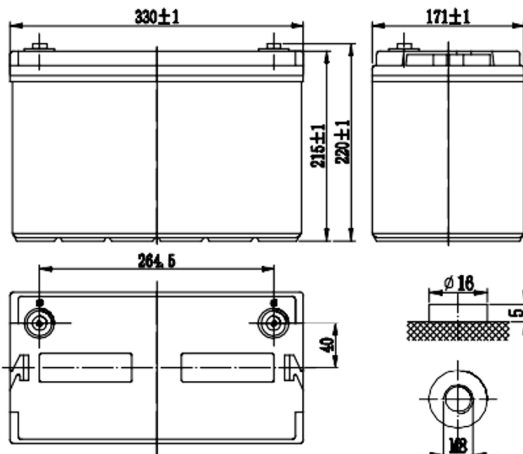
- Positive and negative plates in lead-calcium-tin alloy.
- Stable Quality & High Reliability
- Sealed Construction.
- Long Service Life.
- Maintenance-Free Operation
- Low Pressure Venting System
- Low Self Discharge
- U.L. Component Recognition
- Six Month Shelf Life at 20°C
- Design life 10 Years

Performance Characteristics

- Nominal Voltage: 12V
- Number of Cells: 6
- Nominal Capacity 77°F (25°C)
 - 10 Hour Rate (10.0A, 10.8V): 100Ah
 - 5 Hour Rate (17.5A, 10.5V): 87.5Ah
 - 1 Hour Rate (66.2A, 9.60V): 66.2Ah
- Internal Resistance
- Fully Charged Battery 77°F (25°C) 5m 0hms
 - Self-Discharge
 - 3% of capacity declined per month at 20° (average)
- Operating Temperature Range
 - Discharge: -20~60°C
 - Charge: -10~60°C
 - Storage: -20~60°C
- Max. Discharge Current 77°F (25°C): 900A (5s)
- Short Circuit Current: 2100A
- Charge methods: Constant Voltage Charge 77°F (25°C)
 - Cycle use: 14.4—14.7V
 - Maximum charging current: 30A
 - Temperature Compensation: -30mV/°C
- Standby use: 13.6— 13.8V
 - Temperature compensation: -20mV/°C

Dimensions and Weight

Length (mm/inch)	330/13.0
Width (mm/inch)	171/6.73
Height (mm/inch)	215/8.46
Total Height (mm/inch)	220/8.66
Approx. Weight (kg/lbs)	32.0/70.6



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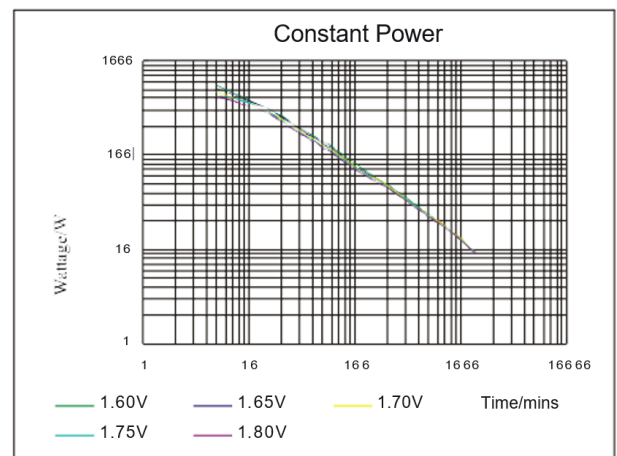
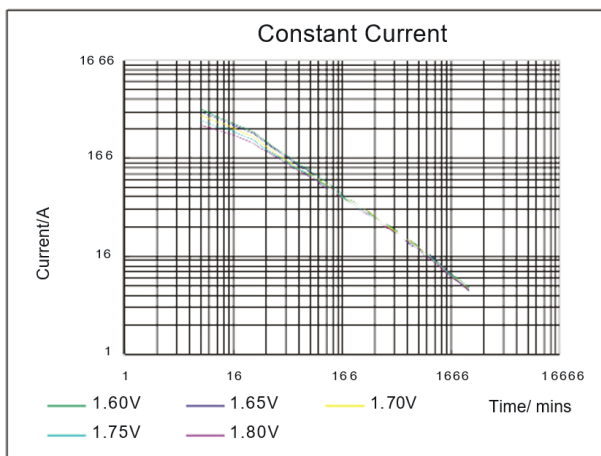
Discharge Data

Constant Current Discharge Data (Amperes at 25°C)																									
End Voltage Per Cell / V		10m	15m	20m	25m	30m	35m	40m	45m	50m	55m	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60		229	185	146	123	108	96.3	87.4	80.5	74.8	70.1	66.2	47.1	37.5	31.8	27.9	22.4	19.0	16.3	14.3	12.9	11.7	10.8	9.06	4.70
1.65		221	178	141	119	104	93.2	85.0	78.7	72.2	66.9	62.5	45.1	36.4	31.2	27.7	21.8	18.3	15.7	13.9	12.5	11.5	10.6	9.01	4.68
1.70		200	164	130	110	96.0	86.1	78.8	73.0	68.4	64.6	61.5	44.4	35.8	30.6	27.2	21.5	18.0	15.5	13.7	12.4	11.3	10.5	8.93	4.59
1.78		187	153	123	105	93.0	83.7	76.7	71.3	67.0	63.4	60.5	43.7	35.3	30.2	26.9	21.0	17.5	15.1	13.4	12.1	11.1	10.3	8.76	4.50
1.80		175	143	117	101	91.0	82.0	75.3	70.0	65.0	60.8	57.4	41.4	33.3	28.5	25.3	20.2	17.2	14.8	13.1	11.8	10.8	10.0	8.50	4.42

The above characteristics data are average values obtained with three charge/discharge cycles, not the minimum values.

Constant Power Discharge Data (Watts per cell at 25°C)																									
End Voltage Per Cell / V		10m	15m	20m	25m	30m	35m	40m	45m	50m	55m	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60		392	321	260	223	199	178	162	150	140	131	124	88.4	70.6	60.0	52.8	42.2	35.8	30.6	26.9	24.2	22.0	20.3	17.4	9.25
1.65		379	315	252	213	188	170	156	146	135	125	118	84.5	67.8	57.8	51.2	41.3	35.4	30.4	26.7	23.9	21.8	20.1	17.1	9.20
1.70		360	299	241	206	183	163	149	137	128	121	114	82.6	66.8	57.3	50.9	41.0	35.0	30.0	26.4	23.8	21.7	20.0	17.0	9.13
1.78		353	294	236	200	177	159	145	134	125	117	111	80.0	64.5	55.3	49.1	39.9	34.4	29.4	25.9	23.3	21.2	19.6	16.7	8.98
1.80		329	279	225	193	171	154	141	131	120	112	104	76.5	62.5	54.1	48.5	39.4	34.0	29.0	25.5	22.8	20.8	19.1	16.2	8.74

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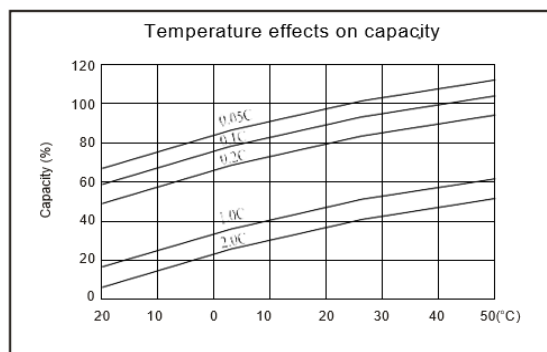
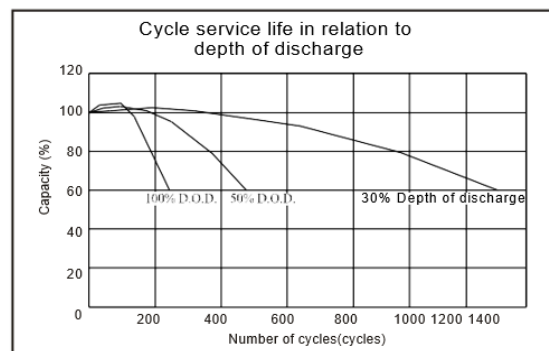
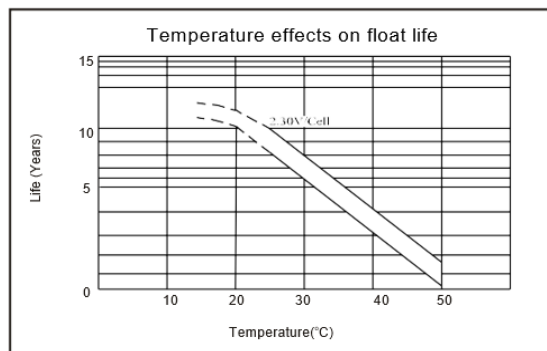
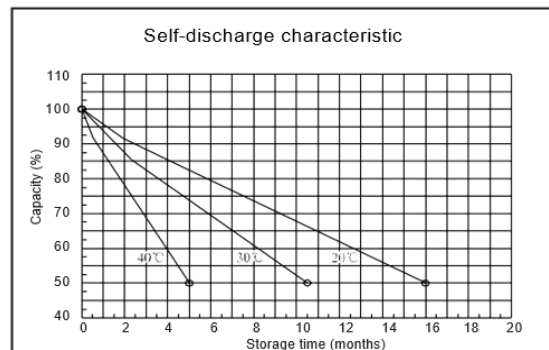
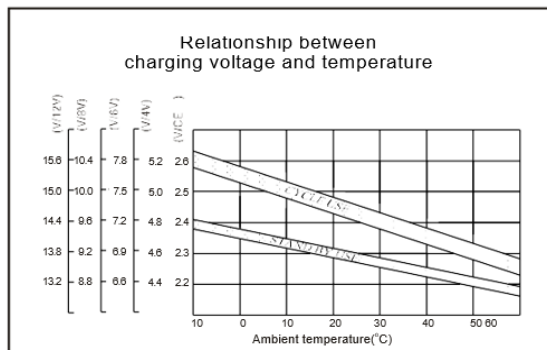
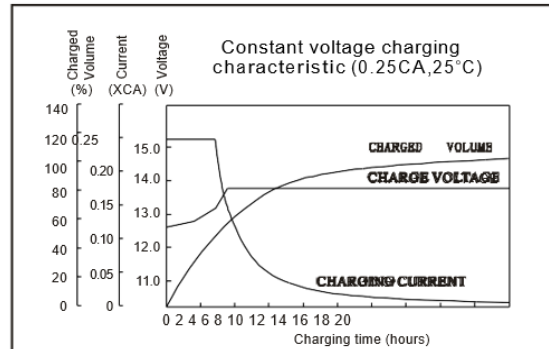
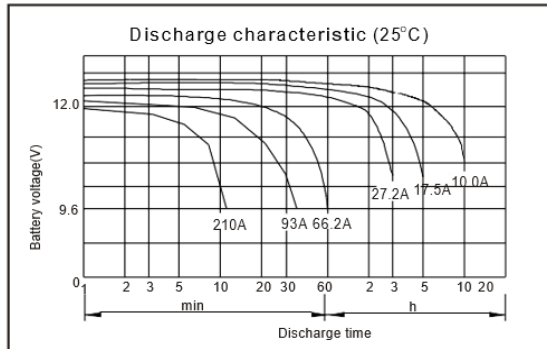
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