



GFX-420 6 OPzS 420



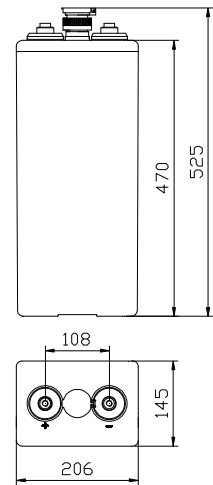
Application:

- Solar and wind power system
- Electric power, nuclear power
- Telecommunication
- UPS
- Marine

Features of performance application

- ✚ Designed service life of 22 years
- ✚ Supplement water period is 0.25-1 year (normal) 1-2 year (choose water content recombination valve)
- ✚ High cycle service life
- ✚ Wide operation temperature range
- ✚ Excellent deep cycle performance
- ✚ Superior low current discharge performance
- ✚ Better safety performance and reliability
- ✚ Modular and installation design
- ✚ Performance/price ratio is high and yearly operating cost is low
- ✚ Environmental friendly

Rated voltage	2 V
Capacity@ 25°C(77°F)	420Ah @ 10hr to 1.80V per cell
Weight	Without electrolyte: about 25.5 kg (56.1 lb) With electrolyte: about 33.5 kg (73.7 lb)
electrolyte density (charged)	1.240±0.01g/cm ³ (20°C) (68°F)
Reference internal resistance (charged)	About 0.48mΩ@ 25°C(77°F)
Short-circuit current	About 4042A (0.1S reference value)
Max discharge current	1260A (5sec)
Self-discharge	< 10% 90 days @ 25°C (77°F)
Temperature range	Application: -20°C ~ 50°C(-4°F ~ 122°F) Storage: 0°C~20°C(32°F~68°F) Recommendation: 20°C ~ 25°C(68°F~77°F)
Max charge current	63A
Charge voltage @ 25°C(77°F)	Float charge: 2.23V, average charge: 2.35V Temperature compensation factor: -3 mV/°C
Terminal output	M10 copper terminal (HPb59-1)



Execution standard:

IEC60896-11 DIN40736
BS EN 61427-2002
GB/T13337.1

Q/321284KCC 03-2006

Authentication and certificate:

Certificate of Qualification on Perfecting Measurement & Measuring System

GB/T19022-2003

ISO10012:2003、IDT

Quality Management System Authentication

GB/T19001-2000

NO.03006Q10002R0M-2

Environmental Management System Authentication

ISO 14001:2004

NO.010607E2024R1M-2

Occupational Health Management System Authentication

GB/T28001-2001

NO.010607S10147R0M-2

CE authentication

EN 61000-6-3:2001+A11:2004

EN 61000-6-1:2001

National Industrial Product Production License

XK06-044-00012

Structure features of Shuangdeng GFX series acid-proof stationary battery:

- Plate: positive plate adopts tubular type plate which can effectively prevent active substance falling, positive plate frame is made of complex alloy, the alloy crystal particle is tiny and dense, the corrosion-resisting performance is good and service life is long. The negative plate adopts pasted plate, grid adopts radiated structure, which enhances utilization ratio of active substance and discharge capability of strong current; moreover, the charge reception capability is strong.
- Battery case: adopt AS transparent case with corrosion prevention, high strength and beautiful appearance, the internal structure and state of battery can be directly observed via transparent case.
- Separator: the combined separator of multi-hole corrugated plastic plate and micro-bore rubber separator have bigger electrolyte storage space, which enhances dispersion speed of electrolyte, greatly reduces internal resistance of battery and prevents dendrite short circuit after deep discharge.
- Terminal sealing: the built-in copper-core lead-based terminal post has strong current carrying capacity and corrosion resistance. The unique terminal post sealing structure can effectively eliminate the stress which is generated due to plate extension, leakage is avoided, sealing reliability of terminal post is ensured and service life of battery is greatly increased.
- Acid resistant bolt: adopt special funnel-shaped acid resistant bolt which can filter acid fume and prevent flame, the density and temperature of electrolyte can be measured directly, use is safe and maintenance is convenient.



Discharge current at different final voltages and different discharge rates unit: A (25°C, 77°F)

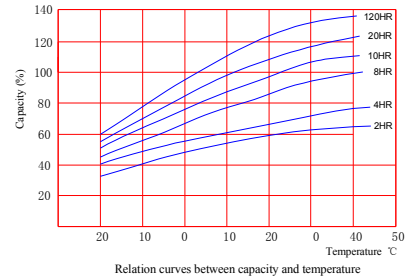
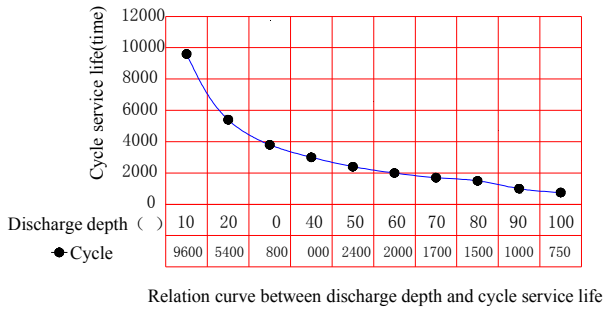
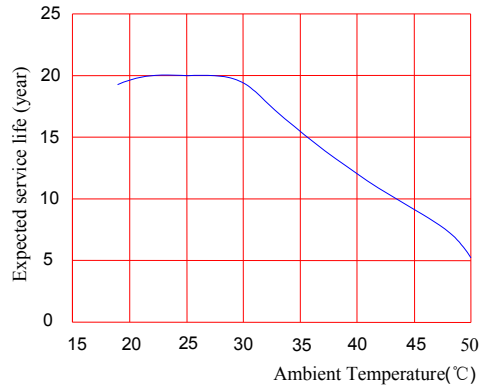
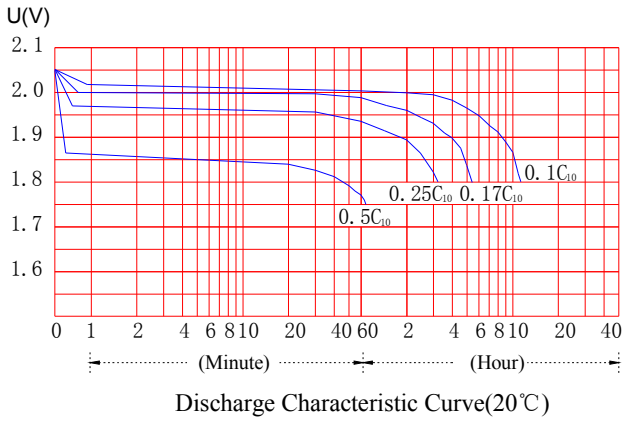
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100hr	120hr
1.90V	202	184	167	164	154	151	118	109	81	67	59	45	40	21.87	5.76	4.83
1.85V	222	220	229	215	177	173	136	124	90	74	64	48	42	24.05	6.06	5.08
1.80V	317	310	301	262	208	200	140	135	105	86	76	54	45	25.25	6.27	5.26
1.75V	380	372	359	296	237	219	156	146	110	89	78	55	46	26.26	6.43	5.39

Discharge power at different final voltages and different discharge rates unit: W (25°C, 77°F)

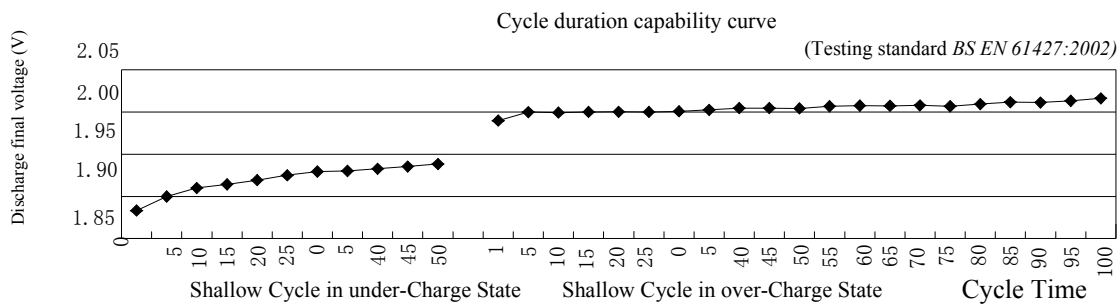
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100hr	120hr
1.90V	363	330	303	292	279	266	242	217	171	142	122	89	77	43.74	11.52	9.66
1.85V	399	396	377	363	332	301	272	242	190	157	135	96	83	47.62	12.00	10.06
1.80V	615	601	535	481	432	383	335	286	223	183	154	108	90	49.49	12.29	10.31
1.75V	738	721	618	541	487	432	370	308	234	191	159	112	95	50.68	12.41	10.40



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Remark: a) test circumstances: 20-30°C, relative humidity is 50~80percent;
 b) charge mode: electricity of charge is equal to 105~115percent of discharge
 c) residual capacity is 80 percent C₁₀



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Shuangdeng Group promises to provide excellent engineering service for customers, including product solution, installation design and on-site maintenance.

The above data is only taken as reference instead of inspection standard. Additional notification won't be available for parameter change due to improvement and regulation of product. Inspection shall be performed in accordance with standards.

We must make a statement, when the battery service life and safe operating performance is confirmed, the test condition will be stricter; accordingly, the battery shall not be used in these conditions, because it's difficult for battery to reach expected service life.