



### GEL Plus Batteries

The GEL Plus range of gel technology batteries offers outstanding performance including a 15+ years design life. The GEL Plus batteries is designed based on the LSE series, using the polymer gel electrolyte. Built to the highest standards and compliant with the latest IEC60896- 21/ 22 standard. this range also offers 100% capacity out- of- the- box and is capable of handling deep discharges for complete peace of mind. The use of flexible connectors and the ability to be installed both horizontally and vertically allows for multiple installation possibilities.



### Application

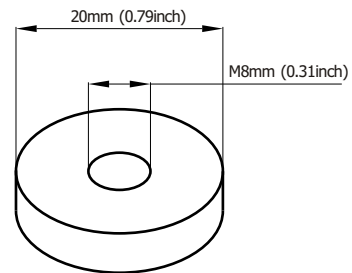
- Correspondence exchange and transmission system
- Mobile communication system
- Power plant and power transformer system
- Radio and broadcasting station
- Navigation and signaling system
- Emergency power system
- UPS
- Other spare, circulatory system

### General Features

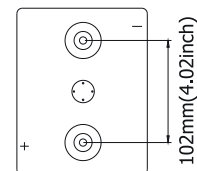
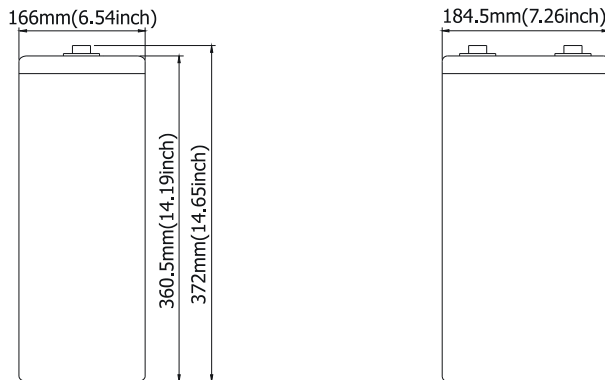
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

### Construction

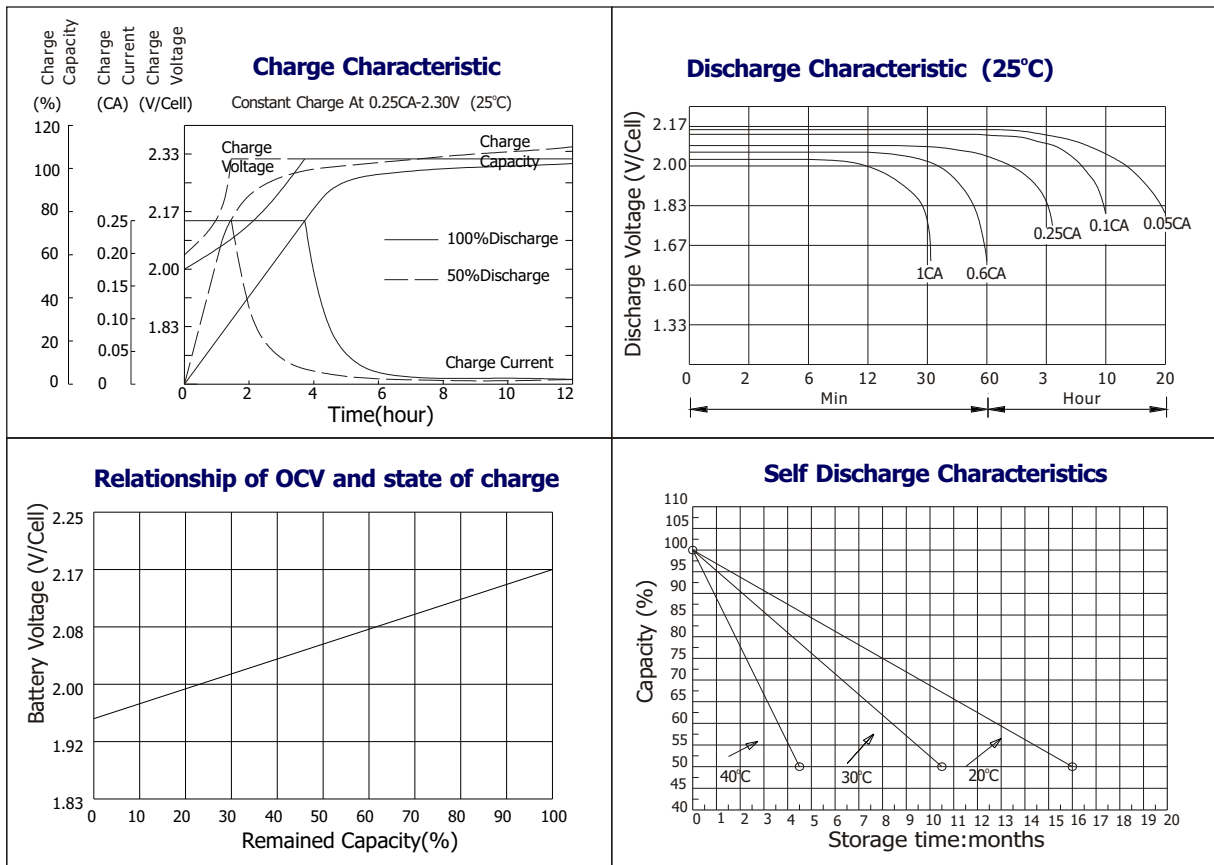
- |           |                   |              |                                    |
|-----------|-------------------|--------------|------------------------------------|
| Component | .....Raw material | Sealant      | .....Epoxy Resin                   |
| Positive  | .....Lead dioxide | Safety valve | .....EPDR                          |
| Negative  | .....Lead         | Terminal     | .....Copper                        |
| Container | .....ABS          | Separator    | .....Macromolecule polymer         |
| Cover     | .....ABS          | Electrolyte  | .....sulfuric acid thixotropic Gel |



Terminal Dimensions



Battery Model	GELPlus2-400			
Designed Floating Life	15 Years			
Capacity(25°C)	20HR(20.65A,1.75V)	10HR(40A,1.75V)	5HR(72A,1.75V)	1HR(220A,1.75V)
	413AH	400AH	360AH	220AH
Dimensions	Length	Width	Height	Total Height
	166mm(6.54inch)	184.5mm(7.261inch)	360.5mm(14.19inch)	372mm(14.65inch)
Approx. Weight	26.5Kg (58.43 lbs)			
Internal Resistance	Full charged at 25°C: 0.00035 Ohm			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	2.3V-2.35V(-5mV/ °C), max. Current: 100A		2.25-2.27V(-3.3mV/ °C)	



**Constant current discharge ratings - amperes at 25 °C**

End Voltage	Time	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V		667	558	413	261	154	113	76.7	66.1	52.7	43.8	19.7
1.65V		616	521	396	248	151	110	74.8	65.3	52.0	43.3	19.6
1.70V		576	488	364	237	145	107	74.1	64.4	51.1	42.7	19.6
1.75V		549	462	339	226	140	104	72.1	63.4	50.5	42.1	19.3
1.80V		528	436	317	212	134	101	70.4	61.8	49.5	41.1	19.0
1.83V		491	409	302	198	128	97.3	68.7	60.7	48.6	40.2	18.6
1.85V		467	386	283	191	121	95.4	68.0	59.8	48.1	40.0	18.4
1.88V		434	352	265	183	118	93.5	67.3	58.9	47.5	39.7	18.2
1.90V		402	327	242	170	113	89.5	65.5	57.6	46.3	38.6	18.0
1.94V		361	291	215	151	102	82.3	60.7	53.5	43.2	36.4	17.4

**Constant power discharge ratings - watts at 25 °C**

End Voltage	Time	5min	15min	30min	60min	2hour	3hour	5hour	6hour	8hour	10hour	24hour
1.60V		1133	949	756	539	348	257	170	145	114	92.7	41.8
1.65V		1078	911	715	498	319	242	164	141	109	90.4	41.0
1.70V		1036	879	697	474	310	233	160	138	107	87.8	40.2
1.75V		1004	846	673	455	299	224	156	135	103	86.5	39.8
1.80V		976	806	649	445	293	217	152	131	110	85.1	39.2
1.83V		923	769	613	429	281	211	149	127	98.3	83.5	38.6
1.85V		888	734	578	405	269	205	145	124	97.0	81.8	37.6
1.88V		838	680	537	380	250	198	140	119	94.4	79.9	36.6
1.90V		783	637	487	349	234	190	135	116	90.8	75.9	35.2
1.94V		708	570	436	309	216	177	128	111	87.1	72.6	34.8