



OPzV&OPzS Reserve Power Solution

Long Life Tubular Plate

OPzV TUBULAR GEL BATTERY CHARACTERISTIC

Main Technical Advantages

- Completely sealed throughout the life of the battery.
- Service life up to 18-20 years in continuous float operation down to approx. 80% capacity.
- Gel electrolyte.
- Low gassing thanks to antimony-free alloy and internal oxygen recombination.
- Minimum space required, room requirements are minimal (e.g. No washing facilities needed), ventilation requirements are minimal.
- Easy to move and handle.
- Easy install using cable connectors with insulated terminal covers.
- Ready for immediate use without further commissioning work.
- Can be supplied as a standard vertical installation or by special request, for a horizontal installation.
- Very low self-discharge <50% of rated capacity in 2 years at 20°C ambient temperature.
- Deep discharge protected, a load can be connected to the battery for up to 4 weeks.
- No internal short circuits possible due to the gel structure.
- No acid stratification, so no equalizing charge necessary.



General Features

- Capacity 200 to 3000 AH.
- Virgin lead plates w/copper alloy terminal inserts (low resistance).
- Wider Operating Temperature: -20 to 55°C (-4 to 131°F).
- Solid ABS jars & covers (UL94V-0 Flame Retardant available).
- 100% initial capacity UL Recognized, IEC61427 Certified, & IATAA pproved for Air Freight.

Main Applications

- Telecommunications
- Radio and cellular telephone relay stations.
- Emergency lighting systems.
- Power stations, Conventional power stations, alternative power (solar, wind).
- Large UPS and computer back-up.
- Railway signaling.
- Maritime standby power on ships and ashore.
- Process and control engineering
- Standby power.
- Buoy lighting

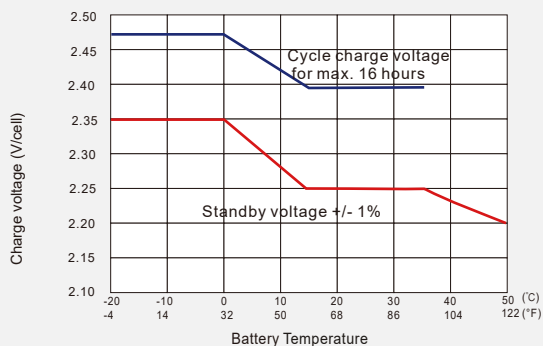


Specifications

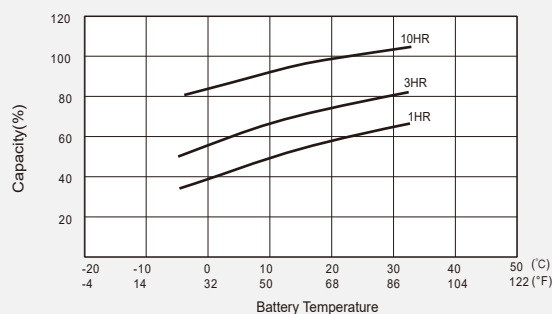
Model	Nomina Voltage (V)	Rated Capacity			Approx Dimension								Approx Weight (Kg)		Terminal type
					Length		Width		Height		Total Height				
		C3(Ah)	C8(Ah)	C10(Ah)	mm	in.	mm	in.	mm	in.	mm	in.	(Kg)	(lbs)	
4OPzV200	2	148.5	185.6	200	103	4.1	206	8.1	355	14	390	15.4	16.5	36.4	T7-A(M8)
50PzV250	2	185.7	232	250	124	4.9	206	8.1	355	14	390	15.4	20	44.1	T7-A(M8)
60PzV300	2	222.9	278.4	300	145	5.7	206	8.1	355	14	390	15.4	23.2	51.2	T7-A(M8)
50PzV350	2	267.6	316.8	350	124	4.9	206	8.1	471	18.5	506	19.9	26	57.3	T7-A(M8)
60PzV420	2	321	380	420	145	5.7	206	8.1	471	18.5	506	19.9	30	66.1	T7-A(M8)
70PzV490	2	374.4	443.2	490	166	6.5	206	8.1	471	18.5	506	19.9	35	77.2	T7-A(M8)
60PzV600	2	445.8	557.6	600	145	5.7	206	8.1	646	25.4	681	26.8	41.5	91.5	T7-A(M8)
80PzV800	2	594.3	743.2	800	191	7.5	210	8.3	646	25.4	681	26.8	57	125.7	T7-A(M8)
100PzV1000	2	743.1	928.8	1000	233	9.2	210	8.3	646	25.4	681	26.8	68.6	151.2	T7-A(M8)
120PzV1200	2	975.6	1254.4	1200	275	10.8	210	8.3	646	25.4	681	26.8	91.2	201.1	T7-A(M8)
120PzV1500	2	1161	1390.4	1500	275	10.8	210	8.3	796	31.3	831	32.7	101	222.7	T7-A(M8)
160PzV2000	2	1625.7	2091.2	2000	399	15.7	214	8.4	772	30.4	807	31.8	155.1	341.9	T7-A(M8)
200PzV2500	2	2032.5	2613.6	2500	487	19.2	212	8.4	772	30.4	807	31.8	191	421.1	T7-A(M8)
240PzV3000	2	2438.7	3136	3000	576	22.7	212	8.4	772	30.4	807	31.8	226.5	499.3	T7-A(M8)

Performance Characteristics

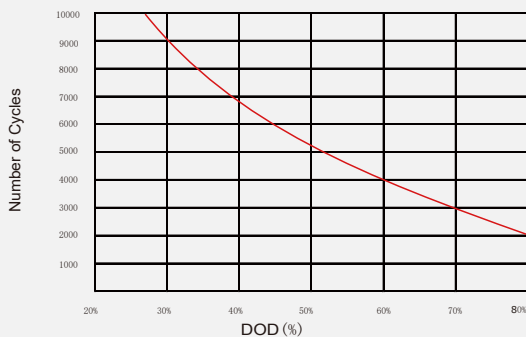
Charge Voltage vs Ambient Temperature Curve



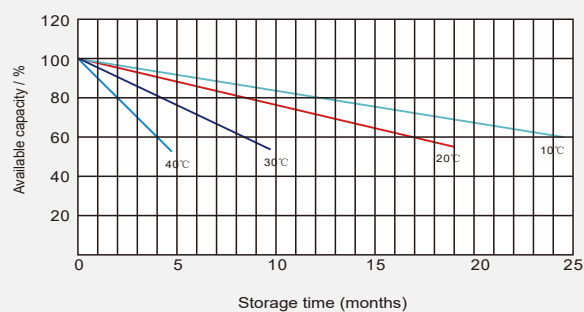
Temperature Effects in Relation to Capacity



Cycle life



Self Discharge Characteristics



OPzS TUBULAR FLOODED BATTERY CHARACTERISTIC

Advantages

- Plates: Lead low-antimony positive plate can effectively prevent shedding of active material. The spines are casted by multi-alloy, of which the crystals are very fine and compact, in order to achieve excellent corrosion resistance and long cycle life. Negative flat plates are pasted plates with wavy construction, greatly improving the utilization rate of active material and high current discharge property. Also the charging acceptance ability is very good.
- Container: SAN transparent container, better corrosion resistance, higher strength, nice appearance. People can directly see the internal construction and actual situation of batteries through SAN containers. Optional flame retardant covers to UL94V-0
- Separator: Imported PVC-SiO₂ separator from Amer-sil, a famous European company. This kind of separator has a large pore rate and lower electrical resistance.
- Terminal sealing: Lead pillar with copper insert has better current loading property and better corrosion resistance. Private sealing construction can effectively eliminate the stress caused by plate growth in later period of battery operation. This can prevent any leakage ensuring the reliability of pillar sealing greatly improving the service life of the battery.
- Anti-acid plug: Special funneled anti-acid plug can filter acid mist and is flame resistant. This is convenient for direct measuring the density and temperature of electrolyte. It is safe and easy to maintain.

General Features

- Lower self discharge.
- Higher thermal capacity, no thermal runaway will occur.
- Exceptional deep cycle performance.
- Wide operation temperature range.
- Long service life, designed life 15-20 years.



Main Applications

- Telecommunications.
- Radio and cellular telephone relay stations.
- Emergency lighting systems.
- Power stations, Conventional power stations, alternative power (solar, wind).
- Railway signalling.
- Maritime standby power on ships and ashore.
- Solar and Wind Turbine Energy Storage.
- Buoy lighting

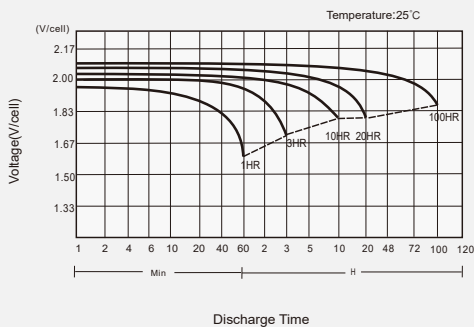


Specifications

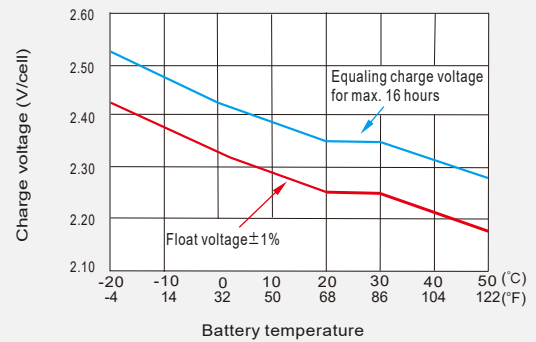
Model	Nomina Voltage (V)	Rated Capacity			Approx Dimension								Approx Weight (Kg)		Terminal type
					Length		Width		Height		Total Height				
		C3(Ah)	C8(Ah)	C10(Ah)	mm	in.	mm	in.	mm	in.	mm	in.	(Kg)	(lbs)	
2 OPzS100	2	77	99	100	103	4.1	206	8.1	355	14	410	16.1	13.2	29.1	T7-B(M10)
3 OPzS150	2	116	148	150	103	4.1	206	8.1	355	14	410	16.1	15.3	33.7	T7-B(M10)
4 OPzS200	2	154	198	200	103	4.1	206	8.1	355	14	410	16.1	17.4	38.4	T7-B(M10)
5 OPzS250	2	193	247	250	124	4.9	206	8.1	355	14	410	16.1	20.4	45	T7-B(M10)
6 OPzS300	2	231	297	300	145	5.7	206	8.1	355	14	410	16.1	23.8	52.5	T7-B(M10)
50PzS350	2	264.3	339.2	350	124	4.9	206	8.1	471	18.5	526	20.7	26.8	59.1	T7-A(M8)
60PzS420	2	317.1	406.4	420	145	5.7	206	8.1	471	18.5	526	20.7	31.5	69.5	T7-A(M8)
70PzS490	2	377.7	484	490	166	6.5	206	8.1	471	18.5	526	20.7	35.8	78.9	T7-A(M8)
60PzS600	2	462.6	592.8	600	145	5.7	206	8.1	646	25.4	701	27.6	45.4	100.1	T7-B(M10)
80PzS800	2	604.2	774.4	800	191	7.5	210	8.3	646	25.4	701	27.6	57.9	127.7	T7-A(M8)
100PzS1000	2	755.4	968	1000	233	9.2	210	8.3	646	25.4	701	27.6	71.8	158.3	T7-A(M8)
120PzS1200	2	906.6	1161.6	1200	275	10.8	210	8.3	646	25.4	701	27.6	85.8	189.2	T7-A(M8)
120PzS1500	2	1133.1	1452	1500	275	10.8	210	8.3	796	31.3	851	33.5	104.8	231.0	T7-A(M8)
160PzS2000	2	1510.8	1936	2000	399	15.7	214	8.4	772	30.4	827	32.6	143.5	316.4	T7-A(M8)
200PzS2500	2	1888.5	2420	2500	487	19.2	212	8.3	772	30.4	827	32.6	181	399.0	T7-A(M8)
240PzS3000	2	2266.2	2904	3000	576	22.7	212	8.3	772	30.4	827	32.6	213.5	470.7	T7-A(M8)

Performance Characteristics

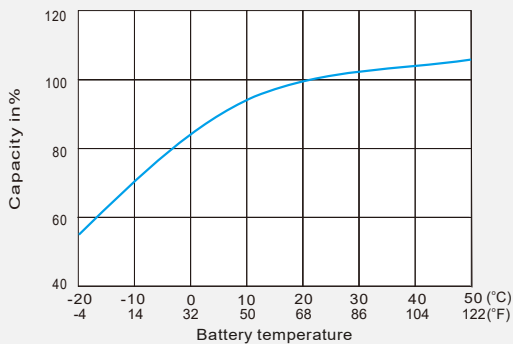
Discharge Characteristics



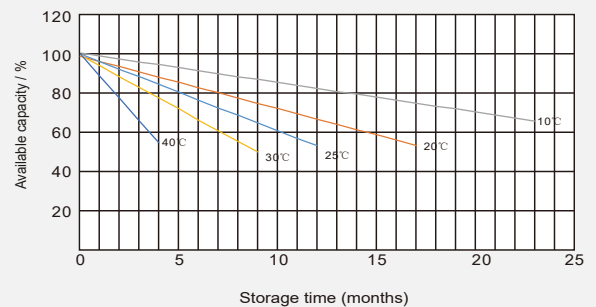
Charge Voltage vs Ambient Temperature Curve



Discharge Capacity vs Ambient Temperature Curve (I₁₀A)



Self Discharge Characteristics



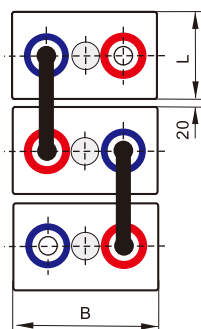
Electrical Specifications

Standby use	2.23~2.25V/cell(25°C)
Cycle use	2.40~2.45V/cell(25°C)
Charging current(max)	0.15CA
Temp.Coefficient	Standby use: -3mv/(°C/cell) Cycle use: -5mv/(°C/cell)

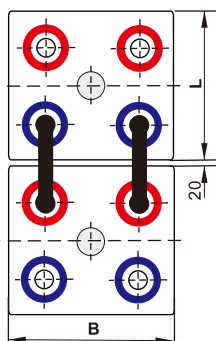
REASONABLE PRICE
RELIABLE QUALITY
TIMELY DELIVERY
FRIENDLY SERVICE

Connection

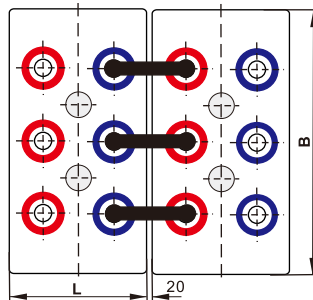
4 OPzS 200 ~ 6 OPzS 600



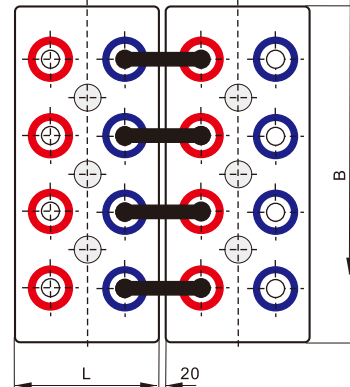
8 OPzS 800 ~ 12 OPzS 1500



16 OPzS 2000



20 OPzS 2500 ~ 24 OPzS 3000



ISO14001

ISO9001

ISO45001



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