



## OPzV Series-Tubular Gel

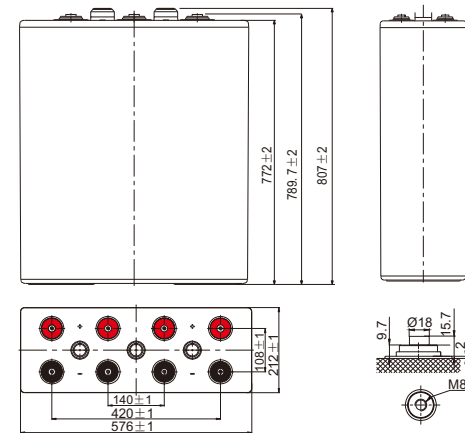
### 24 OPzV3000(2V3000Ah)

#### Specifications

Rated Voltage	2V	
Nominal Capacity	3000Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	576mm(22.68 in.)
	Width	212mm(8.34 in.)
	Container Height	772mm(30.39 in.)
	Total Height	807mm(31.77 in.)
Approx Weight	232.0Kg (511.47 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	3000.0 Ah	(10hr,300.0A,1.80V/cell)
	2616.5Ah	(5hr,523.3A,1.75V/cell)
	2322.6 Ah	(3hr,774.2A,1.75V/cell)
	1673.8 Ah	(1hr,1673.8A,1.67V/cell)
Max. Discharge Current (5s)	24000A	
Internal Resistance(25°C)	Approx.0.23mΩ	
Operating Temp.Range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current(25°C)	750.0A	
Charge voltage(25°C)	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C	



#### Layout



#### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1751.0	1708.0	1562.0	1340.7	906.7	696.0	476.1	333.7	281.1
1.80V/cell	2154.0	2068.0	1820.0	1503.0	993.0	757.0	513.0	357.0	300.0
1.75V/cell	2548.0	2314.0	1940.0	1562.8	1027.5	774.2	523.3	363.0	305.1
1.70V/cell	2859.0	2526.0	2054.0	1631.1	1053.4	789.7	531.0	368.2	308.6
1.67V/cell	3071.0	2667.0	2136.0	1673.8	1070.7	804.3	539.6	372.5	311.1
1.60V/cell	3212.0	2762.0	2191.0	1699.4	1088.0	813.7	544.7	375.1	313.7

#### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	3257.0	3210.0	2985.0	2587.6	1761.5	1357.6	935.1	661.4	558.9
1.80V/cell	3936.0	3831.0	3444.0	2895.0	1925.6	1469.3	1003.7	707.1	595.7
1.75V/cell	4576.0	4228.0	3634.0	2988.9	1968.7	1495.1	1020.9	717.4	604.3
1.70V/cell	5045.0	4548.0	3807.0	3091.4	2011.9	1520.9	1038.0	725.2	610.3
1.67V/cell	5320.0	4731.0	3920.0	3151.2	2046.4	1546.7	1046.6	732.1	615.4
1.60V/cell	5460.0	4828.0	3979.0	3185.3	2063.7	1555.2	1055.2	735.6	618.9



## OPzV Series-Tubular Gel 24 OPzV3000(2V3000Ah)

### Applications

- Telecommunications
- Radio and cellular telephone relay stations
- Emergency lighting systems
- Power stations, Conventional power stations, alternative pwer(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

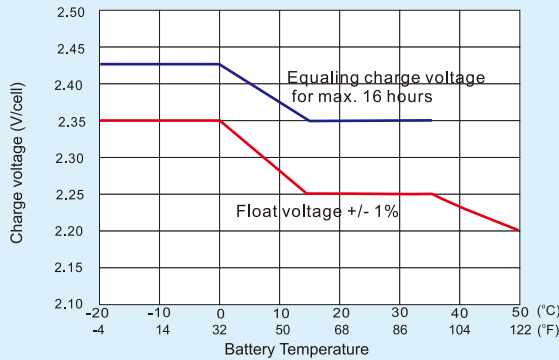
### General Features

- 20 years design life(20°C)
- Better recovery performance
- Wide working temperature range (-20~55)°C
- No electrolyte stratification provides longer service life
- High recombination efficient
- Build in copper core based in lead will carry large current
- Separator imported form AMER-SIL high porosity, PVC-SiO<sub>2</sub> and low resistance
- Pasted negative plate special grid design increase the active material.availability large current discharge and charge ability
- Tubuler type positive plate (polyester tube) prevent the active material from falling. Muti metal alloy pressed positive grid increase the anti corrosion ability and service life

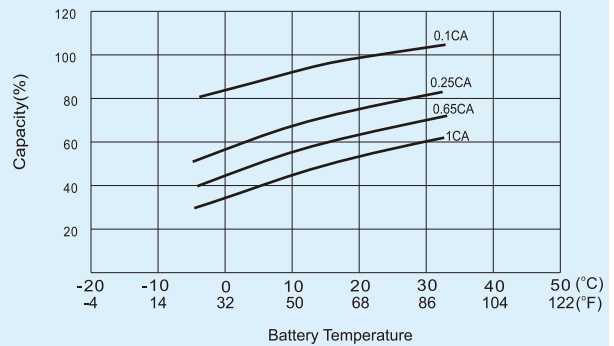
### Standards

- Compliance with IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Certified
- Manufactured in KOYAMA® IATF16949, OHSAS 18001,ISO 9001 and ISO 14001 certified production facilities

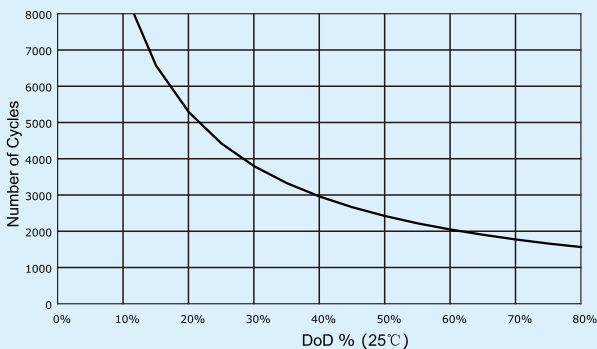
### Charge voltage vs ambient temperature curve



### Temperature effects in relation to battery capacity



### Cycle Life in Relation to DOD



### General Relation of Capacity VS. Storage Time

