OPzV Series-Tubular Gel

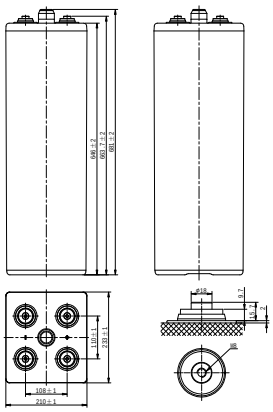
HG10 OPzV1000(2V1000Ah)

HYGEN ENERGY

Specifications

Rated Voltage		2V
Nominal Capacity	1000Ah	(C_{10},1.80V/cell)
Dimension	Length Width Container Height Total Height	233mm(9.17 in.) 210mm(8.27 in.) 646mm(25.43 in.) 681mm(26.81 in.)
Approx Weight		78.5Kg (173.06 lbs)
Terminal		M8
Container Material		ABS/ABS V0(Optional)
Rated Capacity (25°C)	1000.0 Ah 952.0Ah 777.2 Ah 502.0Ah	(10hr,100.0A,1.80V/cell) (8hr,119.0A,1.75V/cell) (3hr,259.1A,1.70V/cell) (1hr,502.0A,1.60V/cell)
Short Circuit Current		6000A
Internal Resistance(25℃)		Approx.0.45mΩ
Operating Temp.Range	Discharge Charge Storage	-20°C~55°C (-4°F~131°F) 0°C~40°C (32°F~104°F) -20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range		25±3°C (77±5°F)
Max.Charging Current(25°C)		250.0A
Charge voltage(25°C)	Standby Temp. Coefficient Cycle Temp. Coefficient	2.23-2.27V/cell -3mV/cell/°C 2.40~2.45V -5mV/cell/°C
Effect of temp. to Capacity	40°C (104°F) 25°C (77°F) 0°C (32°F)	106% 100% 86%
Self Discharge		≤3% per month at 25°C

Layout



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

F.V/Time	1h	3h	5h	8h	10h	24h
1.85V/cell	358.0	213.3	147.3	104.0	93.7	44.5
1.80V/cell	401.3	232.0	158.7	111.2	100.0	46.0
1.75V/cell	417.3	252.3	171.0	119.0	101.7	46.3
1.70V/cell	435.5	259.1	174.4	121.0	102.9	47.1
1.67V/cell	446.9	263.2	177.0	122.7	103.7	47.5
1.60V/cell	502.0	268.1	179.9	124.2	104.6	47.9

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

F.V/Time	1h	3h	5h	8h	10h	24h
1.85V/cell	708.2	418.1	290.4	206.2	186.3	89.0
1.80V/cell	792.4	452.5	311.7	220.5	198.6	91.9
1.75V/cell	818.1	489.8	334.6	235.7	201.4	92.4
1.70V/cell	846.2	498.4	340.3	239.1	203.4	93.8
1.67V/cell	862.5	507.0	346.0	241.7	205.1	94.5
1.60V/cell	965.0	515.6	348.9	244.0	206.3	95.2

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Applications

- Float charging applications: communication center,telecom base station,UPS, power station,electric substation
- Solar& wind energy storage system
- Off-grid & bad-grid hybrid sites

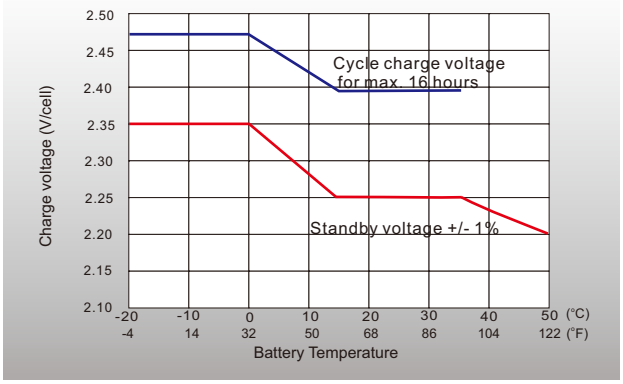
General Features

- 20 years design life(20℃)
- Wide working temperature range (-20~55)℃
- Using fumed silica colloidal electrolyte, which has no stratification, and provide longer cycle and float charge life
- Tubuler type positive plate prevent the active material from falling. Muti metal alloy pressed positive grid increase the anti corrosion ablity and service life
- Pasted negative plate special grid design increase the active material.availablity large current discharge and charge ability
- Excellent recovery ablity from under-charge and over-discharge

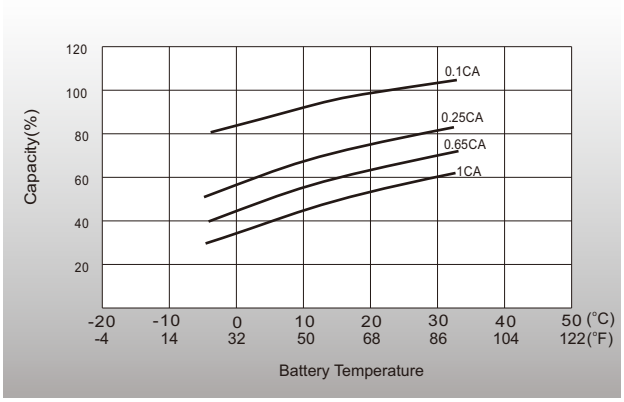
Standards

- Compliance with IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Certified
- We accquired the recognition of various standards: ISO45001/OHSAS18001, ISO9001,ISO14001 and IATF16949

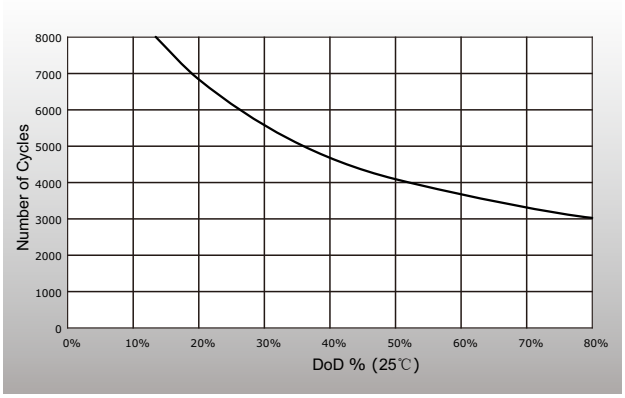
Charge voltage vs ambient temperature curve



Temperature effects in relation to battery capacity



Cycle Life



General Relation of Capacity VS. Storage Time