

OPzV Series-Tubular Gel

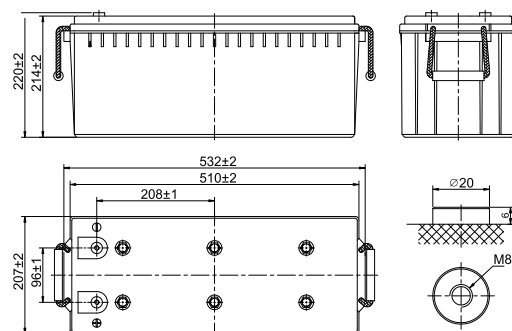
12V 8OPzV160(12V160Ah)

Specifications

Rated Voltage	12V	
Nominal Capacity	160Ah	(C ₁₀ , 1.80V/cell)
Dimension	Length	532mm(20.94in.)
	Width	207mm(8.15in.)
	Container Height	214mm(8.43in.)
	Total Height	220mm(8.66in.)
Approx Weight	59.3Kg (130.73 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	160.0 Ah	(10hr, 16.0A, 1.80V/cell)
	140.5 Ah	(5hr, 28.1A, 1.75V/cell)
	120.9 Ah	(3hr, 40.3A, 1.75V/cell)
	94.9 Ah	(1hr, 94.9A, 1.67V/cell)
Max. Discharge Current(5s)	1280A	
Internal Resistance(25°C)	Approx. 5.1mΩ	
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)	40.0A	
Charge voltage(25°C)	Float	13.5V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	14.1~14.4V
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	10 min	15 min	30 min	1h	2h	3h	5h	8h	10h
1.85V/cell	154.4	136.2	101.8	74.4	47.2	36.0	25.8	18.1	15.3
1.80V/cell	185.7	157.3	114.2	81.6	51.0	38.6	27.0	18.9	16.0
1.75V/cell	213.0	175.8	122.9	86.9	53.6	40.3	28.1	19.4	16.3
1.70V/cell	232.6	190.9	131.5	91.8	55.5	41.9	28.8	19.7	16.5
1.67V/cell	254.3	204.8	137.6	94.9	57.4	43.4	29.4	20.0	16.8
1.60V/cell	271.4	216.6	142.7	97.5	59.4	44.3	30.1	20.3	17.1

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

F.V/Time	10 min	15 min	30 min	1h	2h	3h	5h	8h	10h
1.85V/cell	254.1	233.6	194.2	144.8	92.2	70.4	50.7	35.8	30.6
1.80V/cell	307.2	278.4	218.1	158.1	99.4	75.2	53.1	37.4	31.8
1.75V/cell	357.1	307.2	232.5	167.4	104.0	78.7	55.0	38.4	32.5
1.70V/cell	393.6	330.9	246.6	176.0	107.2	81.3	56.3	39.0	32.8
1.67V/cell	414.7	344.3	255.4	180.8	110.2	83.8	57.4	39.5	33.3
1.60V/cell	425.6	351.4	262.2	185.3	113.4	85.3	58.6	40.2	33.8

OPzV Series-Tubular Gel

12V 80PzV160(12V160Ah)

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

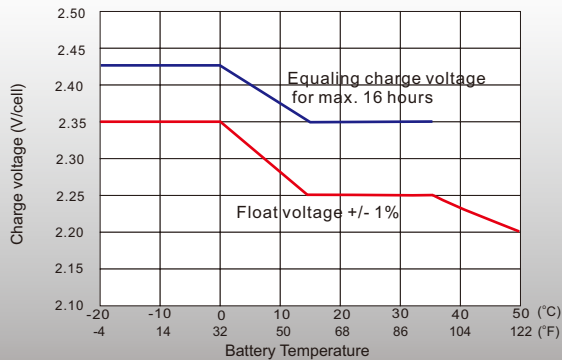
General Features

- 16 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
- Built in copper core based in lead will carry large current
- Separator imported from AMER-SIL high porosity. PVC-SiO₂ and low resistance
- Pasted negative plate special grid design increase the active material. availability large current discharge and charge ability
- Tubular type positive plate (polyester tube) prevent the active material from falling. Multi metal alloy pressed positive grid increase the anti corrosion ability and service life

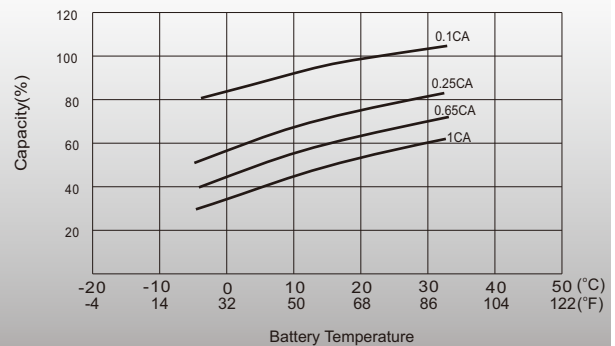
Standards

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

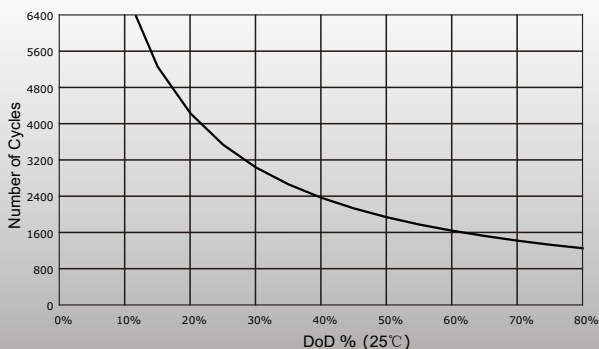
Charge voltage vs ambient temperature curve



Temperature effects in relation to battery capacity



Cycle Life in Relation to DOD



General Relation of Capacity VS. Storage Time

