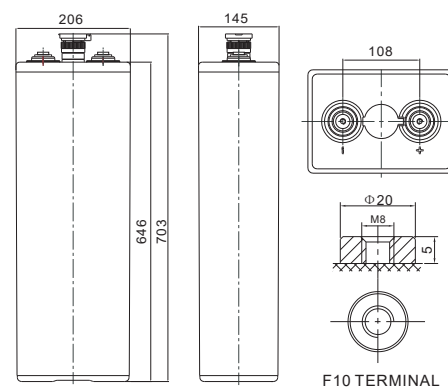


Flooded Tubular Deep Cycle Valve Regulated Lead Acid Battery

OPzS series is flooded Lead Acid battery that adopts Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN40736/EC60896 standards, using patented formula materials. It is suitable for solar and wind renewable energy storage, traction etc. OPzS series is the best choice of energy storage system in high altitude area.

Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	600Ah@10hr-rate to 1.80V per cell @25 °C
Weight	Without Electrolyte 34.4 kg/With Electrolyte 46.4kg
Internal Resistance	Approx. 0.45 mΩ
Terminal	F10(M8)
Max. Discharge Current	2500A(5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	90.0A
Reference Capacity	C3 487.8AH C5 543.0AH C10 600.0AH C20 726.2AH
Float Charging Voltage	2.23 V~2.25 V @ 25 °C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.40 V~2.45 V @ 25 °C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -15 °C ~50 °C Charge: 0 °C ~40 °C Storage: -15 °C ~50 °C
Normal Operating Temperature Range	25 °C ± 5 °C
Self Discharge	OPzS series is flooded Lead Acid battery . It can be stored for up to 2 years before filling acid. Monthly Self-discharge ratio is less than 3.5% at 20 °C .Please charged batteries before using.
Container Material	SAN UL94-HB, UL94-V0 Optional.



Length	145±2mm (5.71 inches)
Width	206±2mm (8.11 inches)
Height	646±2mm (25.4 inches)
Total Height	703±2mm (27.7 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics : A(25°C)

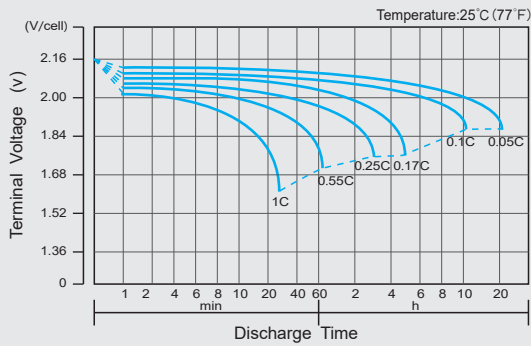
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	633.1	408.4	241.8	176.1	135.8	113.8	99.2	78.0	65.7	37.8
1.65V	613.9	384.3	234.0	171.8	133.9	112.3	97.9	77.4	65.1	37.4
1.70V	566.9	372.3	227.4	167.8	131.6	110.6	96.7	76.8	64.4	37.0
1.75V	508.7	347.6	217.6	162.6	129.4	108.6	94.8	75.5	63.2	36.3
1.80V	459.4	310.0	201.5	152.8	123.7	103.9	90.7	72.1	60.0	34.5
1.85V	383.1	265.7	180.2	138.7	114.2	96.0	84.0	67.3	56.2	32.3

Constant Power Discharge Characteristics : WPC(25°C)

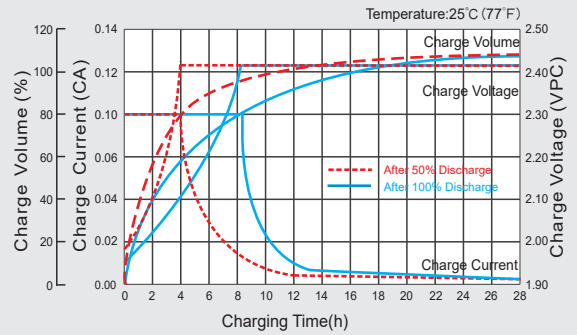
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	1071	696.6	442.0	330.0	262.4	220.4	192.7	153.0	130.5	75.0
1.65V	1053	667.0	430.1	323.3	259.1	218.0	190.8	151.7	129.9	74.7
1.70V	999.9	660.3	419.6	316.7	255.0	215.1	188.9	150.4	128.7	74.0
1.75V	921.8	632.1	406.4	309.5	251.7	212.0	185.8	148.5	126.8	72.9
1.80V	855.4	579.0	381.4	293.4	241.3	203.4	178.5	142.9	121.6	69.9
1.85V	733.3	510.1	348.4	269.8	223.5	188.8	166.2	134.7	114.6	65.9

2V SERIES OPzS 2V 600AH

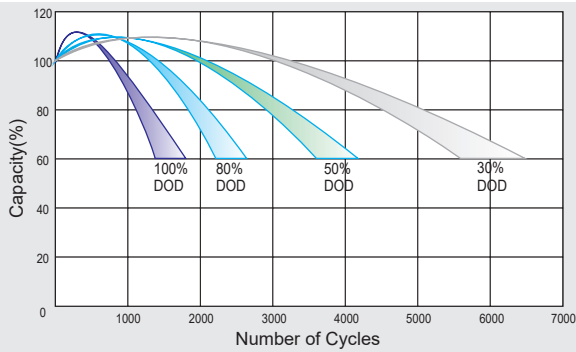
Discharge Characteristics Curve



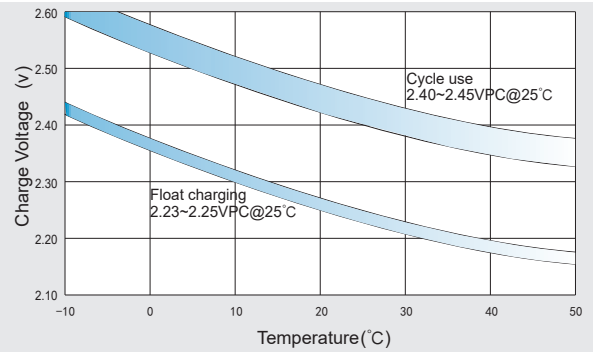
Charge Characteristic Curve for Cycle Use(IU)



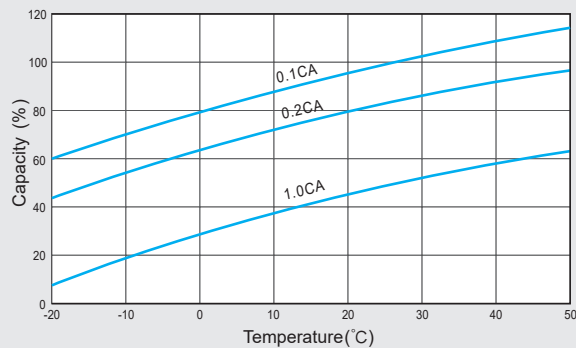
Cycle Life in Relation to Depth of Discharge



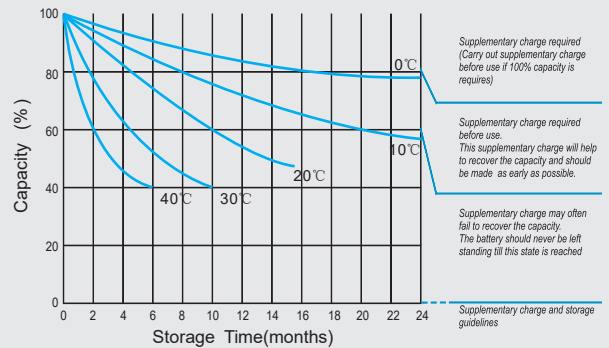
Relationship Between Charging V



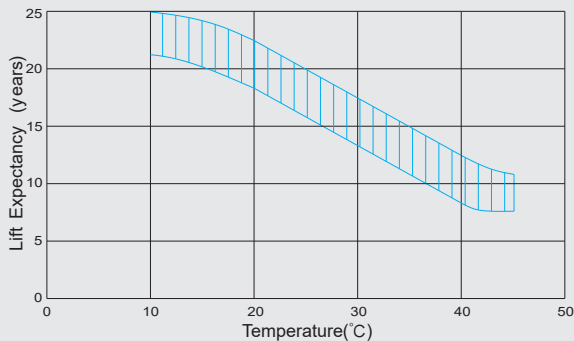
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Life Characteristics Of Standby Use

