



OPzS-420 (2V420Ah)

Rechargeable Lead Acid Battery

www.oremabattery.com

General Features

The battery is manufactured with porous rubber and rubber separator and transparent AS case. The tubular positive plate, pasted negative plate and cid-proof bolt is applied. The recombination plugs may be applied for maintance-free over 5 years .

- (1) The battery has a long service life,under float charging,ambient temperature 25°C,it can operate over 20 years**
- (2) Maxium cycle stability and durability.**
- (3) The battery meet the standard specified in IEC896-1 and DIN40736.**
- (4) High Quality, highest reliability.**

Typical Applications

- Energy storage for solar/wind power generation system
- DC power supply and backup power supply used in electricity utility and nuclear power stations
- Traffic systems:signling systems,lighting
- Telecommunication:moble phone /BTS stations.
- Backup power for UPS and emergency light etc.

Dimensions and Weight



Length (mm / inch).....145 /5.71
 Width (mm / inch)206 / 8.11
 Height (mm / inch) 470 /18.5
 Total Height (mm / inch).....524 / 20.6
 Approx.Weight(Kg / lbs)
 ... (dry).... 23.8 /52.4
 ... (flooded)... 33.2/ 73.0

Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20years
Nominal Capacity 77°F(25°C)	
240 hour rate(2.55A,1.85V)	612Ah
100 hour rate(5.04A,1.85V)	504Ah
10 hour rate(42.0A,1.80V)	420Ah
5 hour rate(70.6A,1.80V)	353Ah
3 hour rate (105A,1.75V)	315Ah
1 hour rate(222A,1.67V)	222Ah
Self-Discharge -- 4.5% of capacity declined per 28days at 20°C(average)	
Operation Temperature Range	
Discharge	-20~65°C
Charge	-10~65°C
Storage	-20~65°C
Max.Discharge Current 77°F(25°C)	
.....	2100A(5s)
Short Circuit Current	3290A

Charge Method

Application	Initial charge	Equalizing charge	Float charge
Charging method	Constant Current Charging	Constant Voltage Charging	Constant Voltage Charging
Charging Voltage at 20°C	---	2.38~2.42v	2.23~2.27V
Temperature compensation coefficient of charging voltage	----	-3 mV/°C	-3 mV/°C
Charging current	21A	42A (Max. Current)	42A (Max. Current)
Charging time 20°C	100% discharge	60h	36h
	50% discharge	48h	24h
Temperture	0~45°C (32~113°F)		



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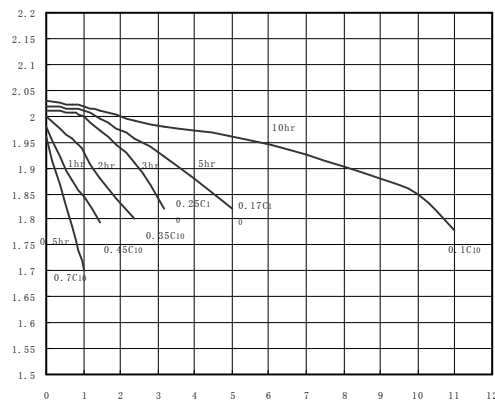
Discharge Constant Current (Amperes at 77°F/25°C)

EndPoint Volts/Cell	30'	1h	2h	3h	4h	5 h	6h	8h	10h	24h	48h	100h	120h	240h
1.70V	275	212	139	107	86.1	73.1	63.8	51.2	42.8	-----	----	----	-----	-----
1.75V	252	198	134	105	85.3	71.4	63.0	50.4	42.8	22.3	12.2	----	-----	----
1.80V	237	185	130	100	84.0	70.6	60.9	49.6	42.0	21.8	12.2	----	-----	----
1.85V	216	181	122	97.4	79.8	66.4	58.8	48.3	40.7	21.4	11.8	5.04	4.37	2.55
1.90V	208	170	109	92.4	74.3	64.3	56.7	46.2	39.1	20.2	11.3	4.96	4.28	2.52

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

EndPoint Volts/Cell	30'	1h	2h	3h	4h	5 h	6h	8h	10h	24h	48h	100h	120h	240h
1.70V	504	398	262	204	164	139	122	98.7	82.7	-----	----	----	-----	-----
1.75V	466	375	255	201	163	137	121	97.0	82.7	44.3	24.3	-----	-----	----
1.80V	447	353	249	191	162	136	118	96.6	82.3	43.5	24.5	----	---	----
1.85V	412	349	235	189	155	130	116	95.3	80.6	42.8	23.8	10.2	8.90	5.25
1.90V	399	331	213	181	147	127	113	92.0	78.1	40.6	23.1	10.1	8.78	5.17

Discharge characteristic



Note: 1.0C =420A in above figure

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