



OPzS-300 (2V300Ah)

Rechargeable Lead Acid Battery

www.oremabattery.com

General Features

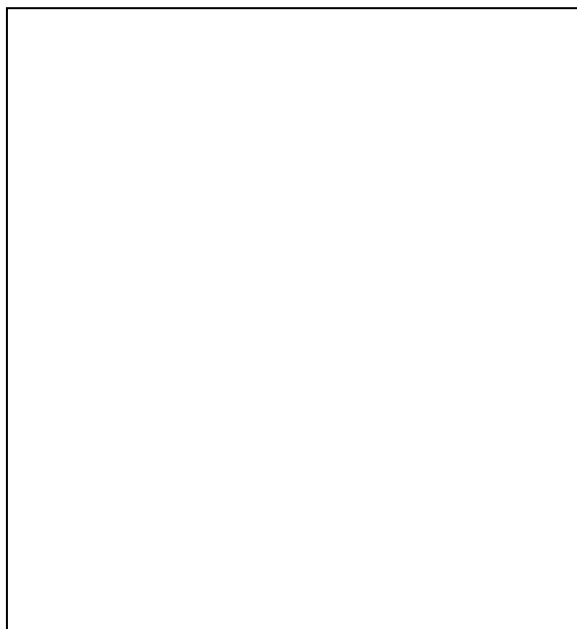
The battery is manufactured with porous rubber and rubber separator and transparent AS case. The tubular positive plate, pasted negative plate and cid-proof bolt is applied. The recombination plugs may be applied for maintance-free over 5 years .

- (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) 355 / 14.0
 Total Height (mm / inch).....408 / 16.0
 Approx.Weight(Kg / lbs)
 ... (dry).... 17.1 /37.6
 ... (flooded)... 22.9/50.4

Performance Characteristics

Nominal Voltage	2V
Number of cell	1
Design Life	20years
Nominal Capacity 77°F(25°C)	
240 hour rate(1.83A,1.85V)	439Ah
100 hour rate(3.60A,1.85V)	360Ah
10 hour rate(30.0A,1.80V)	300Ah
5 hour rate(50.4A,1.80V)	252Ah
3 hour rate (75.0A,1.75V)	225Ah
1 hour rate(159A,1.67V)	159Ah
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)	1500A(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	15A	30A (Max. Current)	30A (Max. Current)
Charging time 20°C	100% discharge	60h	60h
	50% discharge	48h	48h
Temperture	0~45°C (32~113°F)		



OPzS-300 (2V300Ah)

Rechargeable Lead Acid Battery

www.oremabattery.com

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	197	152	99.0	76.5	61.5	52.2	45.6	36.6	30.6	-----	----	----	-----	-----
1.75V	180	142	96.0	75.0	60.9	51.0	45.0	36.0	30.6	15.9	8.70	----	-----	----
1.80V	170	132	93.0	71.1	60.0	50.4	43.5	35.4	30.0	15.6	8.70	----	-----	----
1.85V	155	130	87.0	69.6	57.0	47.4	42.0	34.5	29.1	15.3	8.40	3.60	3.12	1.83
1.90V	149	122	78.0	66.0	53.1	45.9	40.5	33.0	27.9	14.4	8.10	3.54	3.06	1.80

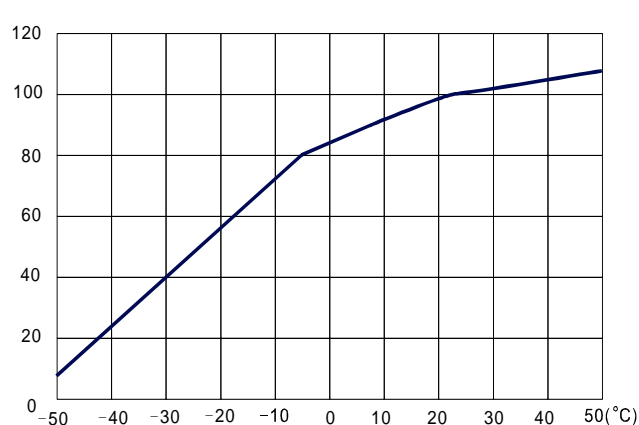
Discharge Constant Power (Watts at 77°F /25°C)

EndPoint Volts/Cell	30'	1h	2h	3h	4h	5 h	6h	8h	10h	24h	48h	100h	120h	240h
1.70V	360	284	187	146	117	99.6	87.3	70.5	59.1	-----	----	----	-----	-----
1.75V	333	268	182	143	117	98.1	86.4	69.3	59.1	31.7	17.4	-----	-----	----
1.80V	320	252	178	137	116	97.2	84.3	69.0	58.8	31.1	17.5	----	---	----
1.85V	294	249	168	135	111	93.0	82.5	68.1	57.6	30.6	17.0	7.32	6.36	3.75
1.90V	285	236	152	129	105	90.9	80.4	65.7	55.8	29.0	16.5	7.20	6.27	3.69

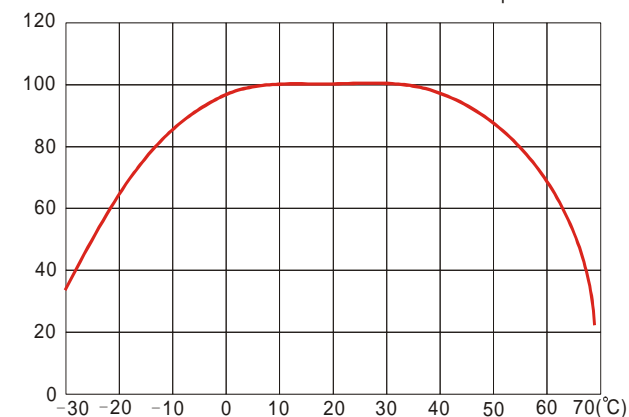
Discharge characteristic

0	0.00	1.01	1.46
2.03	2.024	2.02	2.01
2.02	2.015	2.01	1.995
2.01	2.007	2	1.97
2	1.955	1.93	1.88
1.98	1.875	1.844	1.793

Relation curves of discharge capacity and ambient temperature(I₁₀A)



Relation curves of service life and ambient temperature



Note: 1.0C = 300A in above figure