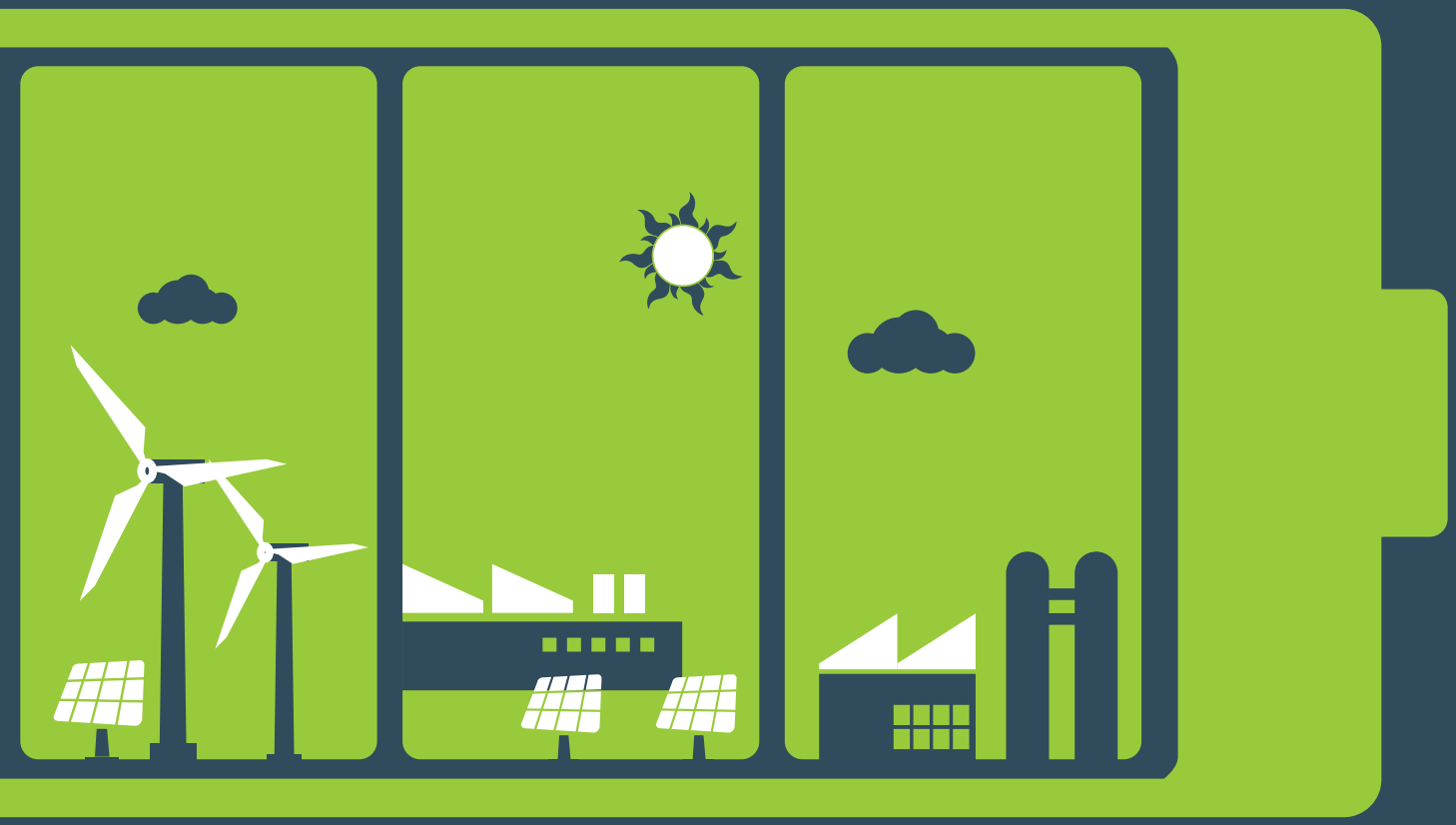
OPzS. SOLAR BATTERIES



CEIL
TRUSTED BATTERY SYSTEMS

INDUSTRIAL
SOLUTION
POWER

Enabling **Reliability**

2V/6V

2V & 6V OPzS

TRANSPARENT SAN CONTAINERS

FOR CRITICAL STANDBY APPLICATIONS

FEATURES

- **TRANSPARENT SAN** CONTAINER
- **TUBULAR** PLATES
- MICROPOROUS AND RESIN BASED **SEPARATORS**
- **PLASTIC ENCAPSULATED BOLTS** ON TERMINALS
- **LARGE** ELECTROLYTE VOLUME
- MICROPOROUS **VENT PLUGS**
- **INSULATED INTERCELL** COPPER CONNECTORS
- **LOW ANTIMONY ALLOY** IN POSITIVE PLATE
- **DESIGN LIFE: 20YEARS** IN STANDBY FLOAT APPLICATION AT 27°C

BENEFITS

- **EASY** MONITORING
- **LONG** LIFE
- EXTREMELY LOW **FOOTPRINT**
- HIGH TEMPERATURE **STABILITY**
- **SAFE** FROM ACCIDENTAL **SHORT CIRCUITS**

HEAD OFFICE: EXIDE HOUSE, 59E CHOWRINGHEE ROAD, KOLKATA 700 020 | **PH** +91 33 2283 2120/33/36/51/71 | **FAX** +91 33 2283 2632/37
CORPORATE MARKETING OFFICE: 6A HATIBAGAN ROAD, ENTALLY, KOLKATA 700 014 | **PH** +91 33 2286 6158/59
WWW.EXIDEINDUSTRIES.COM/WWW.EXIDEINDUSTRIALBATTERIES.COM

TECHNICAL SPECIFICATIONS (2V OPzS)

Type	C100 Capacity upto 1.85 V/Cell	C72 Capacity upto 1.85 V/Cell	C20 Capacity upto 1.80 V/Cell	C10 Capacity upto 1.80 V/Cell	Weight +/- 5% (Kg)		Approx Qty of acid 1.220sp gr (litres)	Overall Cell Dimensions		
					Dry	Acid Filled		Length +/- 3mm	Width +/- 3mm	Height +/- 3mm
4OPzS 200	280	260	240	200	14.4	19.2	3.9	103	206	430
5OPzS 250*	350	325	300	250	16.0	22.0	4.9	124	206	430
OPzS 250	350	325	300	250	19.8	31.0	9.2	145	206	546
6OPzS 300*	420	390	360	300	19.1	26.5	6.1	145	206	430
OPzS 300	420	390	360	300	22.5	33.2	8.8	145	206	546
5OPzS 350*	520	455	420	350	22.0	30.3	6.4	124	206	546
OPzS 350	520	455	420	350	24.5	34.7	8.3	145	206	546
6OPzS 420	620	546	504	420	25.8	35.9	12.2	145	206	546
OPzS 500	730	650	600	500	31.0	45.9	11.5	145	206	721
6OPzS 600	910	780	720	600	35.4	49.4	15.5	145	206	721
7OPzS 700*	1070	910	840	700	42.6	61.5	15.1	210	191	721
OPzS 700	1070	910	840	700	45.6	70.9	20.7	210	233	721
8OPzS 800*	1220	1040	960	800	47.0	65.4	15.1	210	191	721
OPzS 800	1220	1040	960	800	49.1	73.5	20.0	210	233	721
9OPzS 900	1370	1170	1080	900	53.4	77.1	19.4	210	233	721
10 OPzS 1000	1520	1300	1200	1000	57.4	80.2	18.7	210	233	721
11OPzS 1100	1630	1430	1320	1100	62.5	89.3	22.0	210	275	721
OPzS 1125	1670	1462	1350	1125	65.5	104.5	32.0	210	275	871
12OPzS 1200*	1740	1560	1440	1200	67.0	93.2	21.5	210	275	721
OPzS 1250	1820	1625	1500	1250	70.1	106.2	29.6	210	275	871
12OPzS 1500	2170	1950	1800	1500	84.0	117.9	27.8	210	275	871
13OPzS 1625*	2355	2112	1950	1625	96.0	148.3	42.9	214	399	847
14OPzS 1750*	2540	2275	2100	1750	102.0	153.4	42.1	214	399	847
16OPzS 2000*	2900	2600	2400	2000	110.7	160.0	40.4	214	399	847
18OPzS 2250*	3250	2925	2700	2250	131.5	193.4	50.7	212	487	847
20OPzS 2500*	3610	3250	3000	2500	145.0	204.8	49.0	212	487	847
22OPzS 2750*	3980	3575	3300	2750	158.5	231.8	60.1	212	576	847
24OPzS 3000*	4340	3900	3600	3000	170.0	241.5	58.4	212	576	847

* Imported Cell Box where lead time is 12 - 14 weeks. The same cells can be supplied in higher indigenous cell box which can be despatched in 4 - 5weeks The dimension of indegenous cell box is mentioned in above table.

TECHNICAL SPECIFICATIONS (6V OPzS)

Type	Nominal Voltage (V)	Capacity 10Hrs rate @ 27°C to 1.80vpc	Opetating Eectrolyte Specific Gravity at 27°C (+/-0.005)	Dimension (+/- 3mm)			Overall Height (+/-5mm)	Weight (+/-3%)	
				Length (mm)	Width (mm)	Height (mm)		Dry (Kg)	Filled (Kg)
3OPzS250	6V	250	1.240	487	187	388	440	40.0	64.5
3OPzS300	6V	300	1.240	487	187	388	440	44.5	68.5

HEAD OFFICE: EXIDE HOUSE, 59E CHOWRINGHEE ROAD, KOLKATA 700 020 | **PH** +91 33 2283 2120/33/36/51/71 | **FAX** +91 33 2283 2632/37
CORPORATE MARKETING OFFICE: 6A HATIBAGAN ROAD, ENTALLY, KOLKATA 700 014 | **PH** +91 33 2286 6158/59
WWW.EXIDEINDUSTRIES.COM/WWW.EXIDEINDUSTRIALBATTERIES.COM

INITIAL **CHARGING INSTRUCTION**

FILLING IN SPECIFIC GRAVITY OF ELECTROLYTE : **1.220 +/- 0.005 AT 20^{0}C**

TOTAL MINIMUM Ah INPUT : **5 TIMES OF C10 CAPACITY**

REST PERIOD : 12 - 16 HOURS

INITIAL CHARGING CURRENT :
STARTING RATE : **12% OF C (10) CAPACITY**
FINISHING RATE : **6% OF C (10) CAPACITY**

THE SPECIFIC GRAVITY OF ELECTROLYTE : 1.240 +/- 0.005 AT 20^{0}C

RECOMMENDED FLOAT CHARGE

TEMPERATURE	FLOAT VOLTAGE
<5^{o}C	2.24 +/- 0.02 VPC
5^o - 19^{o}C	2.23 +/- 0.02 VPC
20^o - 35^{o}C	2.23 +/- 0.02 VPC
36^o - 45^{o}C	2.22 +/- 0.02 VPC

HEAD OFFICE: EXIDE HOUSE, 59E CHOWRINGHEE ROAD, KOLKATA 700 020 | **PH** +91 33 2283 2120/33/36/51/71 | **FAX** +91 33 2283 2632/37
CORPORATE MARKETING OFFICE: 6A HATIBAGAN ROAD, ENTALLY, KOLKATA 700 014 | **PH** +91 33 2286 6158/59
WWW.EXIDEINDUSTRIES.COM/WWW.EXIDEINDUSTRIALBATTERIES.COM

INITIAL **CHARGING INSTRUCTION**

ACID FILLING INSTRUCTION :

• Fill the cells with battery grade sulphuric acid of 1.220 +/- 0.005 specific gravity at 20 deg C conforming to the following specifications :

Iron (as Fe) percent by mass : 0.001 (Max)
Chlorides (as Cl) percent by mass : 0.0003 (Max)

• Min & Max marking are there on the transparent SAN container, the lower level corresponding to the minimum height of electrolyte in the cell whereas the max line indicates the maximum level of electrolyte.

• After initial filling, acid will soak into the plates and separators, and the level should be restored with more acid to the ,maximum level after around 6 – 8 hrs.

***Note** : If the electrolyte temperature exceeds 55 deg C, please allow it to drop below 42 deg C prior to the commencement of charging. If required, the cooling process should be facilitated by providing suitable fans / water bath ensuring that the same is accomplished with 4 to 5 hrs after pouring electrolyte.

PROCEDURE FOR INITIAL CHARGING :

• During initial filling & charging, the batteries should be charged at Constant Current rate, up to 2.75 volts per cell.

• The charging should be continued even after the battery reaches 2.75 volts per cell till no rise of the Voltage and sp. Gravity is observed in the cells and the readings remain constant for consecutive 3 – 4 hourly readings.

• The sp. Gravity of all the cells to be adjusted to 1.220 +/- 0.005 (the service gravity) at 20 deg C, using 1,400 sp. Gravity Battery Grade Sulphuric Acid / Battery Grade Water conforming to the following specifications :

pH : 6.5 – 7.5
Heavy metals (as Pb) mg/l : 0.1 (max)
Iron % manganese mg/l : 0.1 (max)
Specific electrical conductivity
At 25° C in dionic units : 5 (max)

• Minimum Ah inputs should be 5 to 5.5 times of the Ah capacity of cell / battery.

*** Charging should be continued at constant current till**
a) All cells are gassing freely at top of charge voltage 2.75 volts per cell at finished rate.
b) No rise of voltage for 3 to 4 consecutively hourly readings after 2.75 volts per cell (vpc).
c) No rise of Sp.Gr. for 3 to 4 consecutively hourly readings after 2.75 volts per cell (vpc).
d) Minimum Ah input (5 to 5.5 times of Ah capacity of cell / battery) is given.

THEORITICAL INPUTS :

• Filling in Acid Sp. Gravity : 1.220 +/- 0.005 at 20 deg C.
• Soaking time : 6 – 8 hrs.
• Initial Charging Current (Amps) : At 6 % rate of the Ah capacity of Battery up to 2.75 vpc, alternately 12 % rate of Ah Capacity up to 2.36 vpc & at 6 % rate up to 2.75 vpc, till end of charging.

Minimum Ah input : 5 – 5.5 times of Ah capacity of Call / Battery.
Approx. duration of initial charging : 75 to 80 hours, if required more.
During regular use the battery should be recharged with compatible Charger for standby batteries.

HEAD OFFICE: EXIDE HOUSE, 59E CHOWRINGHEE ROAD, KOLKATA 700 020 | **PH** +91 33 2283 2120/33/36/51/71 | **FAX** +91 33 2283 2632/37
CORPORATE MARKETING OFFICE: 6A HATIBAGAN ROAD, ENTALLY, KOLKATA 700 014 | **PH** +91 33 2286 6158/59
WWW.EXIDEINDUSTRIES.COM/WWW.EXIDEINDUSTRIALBATTERIES.COM

INTERRUPTIONS :

The charge may be given continuously or in cycles of not less than 8 hrs charge and not more than 16 hrs rest, until it is completed.

ELECTROLYTE LEVEL :

The level of electrolyte may fall slightly during the charge. Maintain it throughout the charge by adding acid as used for filling.

ADJUSTMENT OF ELECTROLYTE :

• If at the end of first charge, the specific gravity of the electrolyte exceeds 1.250, withdraw some electrolyte and add battery grade water, continue the charge so that the water and acid are thoroughly mixed.

• If at the end of first charge, the specific gravity of the electrolyte is below 1.240 after voltage and specific gravities have remain constant for 2 to 3 hrs, withdraw some of the electrolyte and add acid of 1.350 to 1400 specific gravity, continuing the charge meantime.

NEVER MAKE AN ADJUSTMENT ON A CELL WHICH DOES NOT GAS ON CHARGE :

Final working specific gravity should be 1.220 +/- 0.005 at 20 deg C.

Note : * The correction factor to be applied for variation of specific gravity with temperature. Add 0.007 to the observed reading for every 10 deg C above 20 deg C to obtain the corrected reading at 20 deg C.

* Subtract 0.007 from the observed reading for every 10 deg C below 20 deg C to obtain the corrected reading at 20 deg C.

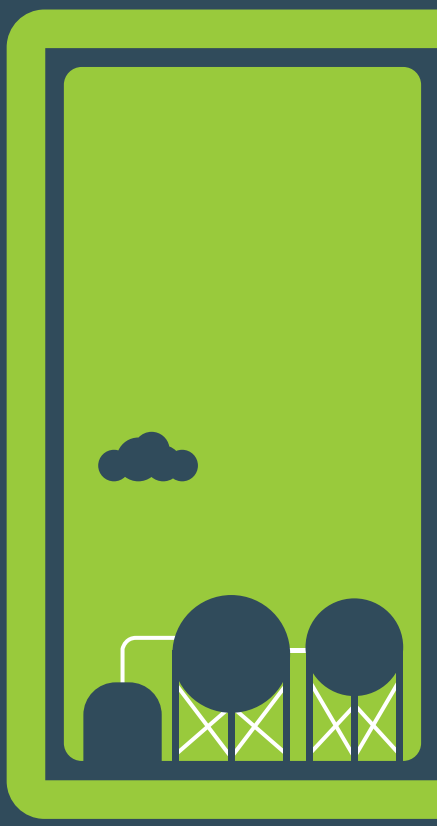
APPLICATIONS

- SUB STATIONS
- POWER PLANTS
- SOLAR PHOTOVOLTAIC
- SWITCH GEARS

HEAD OFFICE: EXIDE HOUSE, 59E CHOWRINGHEE ROAD, KOLKATA 700 020 | **PH** +91 33 2283 2120/33/36/51/71 | **FAX** +91 33 2283 2632/37
CORPORATE MARKETING OFFICE: 6A HATIBAGAN ROAD, ENTALLY, KOLKATA 700 014 | **PH** +91 33 2286 6158/59
WWW.EXIDEINDUSTRIES.COM/WWW.EXIDEINDUSTRIALBATTERIES.COM

QUICK
NOTES

QUICK
NOTES



Head Office: Kolkata: **'Exide House'**, 59E Chowringhee Road, Kolkata - 700 020.
Phone: (033) 2283 2120/33/36/50/51/71/2238/39, **Fax:** (033) 2283 2632/37

Corporate Marketing Office: Kolkata: 6A, Hathibagan Road, Kolkata - 700 014.
Phone: (033) 2286 6158/6159, **Fax:** (033) 2286 6186
E-mail: surajitmu@exide.co.in.
Visit us at: www.exideindustries.com/www.exideindustrialbatteries.com

DESIGN BY **TAXI** | WWW.TAXICREATIVES.IN