

About Us

Orion Systems was established in 1986 and has steadily built itself to be a leading Lift Battery Backup System manufacturer. Growth has been steady, backed by technical expertise & a commitment to quality.

Orion believes "Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction and skillful execution; it represents the wise choice of many alternatives"

The finest end-product is assured by the finest inputs-proven technology, production techniques and quality assurance. All critical raw materials are sourced from branded Indian & Foreign suppliers and corporations.

All this would not have been possible without the patronage and support of our customers. It is the end users we must thank & Orion pledges to make every effort to supply its customers with the highest possible quality products at best possible prices.

Lift Battery Backup System

Introduction to Lift Battery Backup System

Electricity plays a very important part in our life. In fact it can be said that electricity is the backbone of development. It has made things so much easier for humans. Lights, fans, kitchens, lifts, industries, malls.....everything needs electricity.

India is fast becoming a major superpower. But unfortunately we don't have enough electricity generation units. This has led to major power cuts thus affecting production & leading to discomfort to people.

In order to cope up with situations like this Orion Systems was formed in 1985 & has been giving service to thousands of customers. We have a range of products suitable for Homes, Industries, Offices, Hospitals & Lifts.

Imagine a situation wherein you are traveling inside a Lift & the power fails. First you have to get someone's attention. After that you need expert help to open the Lift. Now if the Lift has a AUTO DOOR it becomes even impossible to call anyone. In developed countries it is mandatory to use some Power Backup for Lifts. Even in India it is being made mandatory to use some backup for lifts.

Initially heavy loads like motors, of Lifts or Elevators, were usually run on Diesel Generators. The major drawbacks in Diesel Generators were:

- ▶ High Capital Cost → High Running Cost → Smoke & Noise
- ▶ Government Permissions ➤ Space

Looking at all these drawbacks Orion Systems has developed the product Lift Battery Backup System. This product has been developed essentially for CONTINUOS RUNNING OF LIFTS. In case of MAINS FAILURE, Lift Battery Backup System ensures that there is no break in Power Supply & the Lift continues to run as if nothing happened. The Common Lights & Water Pumps can also be operated on this. The System is always alert & has the intelligence to sense problems like Mains Failure, Phase Fail, Phase Reversal, Short Circuit, Battery Low, Overload & Battery High.

Functioning of Lift Battery Backup System

- When Mains electricity supply is present the load of LIFT, COMMON LIGHTS & WATER PUMPS run on their respective meters.
- The batteries are kept on charging mode.
- When the Mains electricity supply fails Lift Battery Backup System senses it & uses power from the storage batteries. It supplies this power to the load.
- When the Mains electricity supply resumes again the load is switched over to their respective meters while Lift Battery Backup System starts charging the batteries again.
- All of this switching process takes place in a couple of seconds. NO MANUAL HELP IS REQUIRED FOR THIS. THIS IS AN AUTOMATIC PROCESS.



Noiseless



Smokeless



Long Life



Automatic



Environment Friendly

Required



Less Space





Low Maintenance



Low Operating Cost



Lift Battery Backup System, **Batteries and After Sales Services**

Technical Specifications

Model	Paradigm 3000-Paradigm 90000 depending on load	
Rating	3KVA to 90KVA	
Technology	IGBT	
Input Voltage Window	415V +/- 20%, 50Hz	
Output Voltage	415V +/- 5%	
Output Frequency	50Hz +/- 1Hz	
Inverter Efficiency	>85-90% depending on DC voltage	
Acoustic Noise	<45Db at 1 meter	
Battery Voltage	72VDC to 360VDC depending on load	
Backup time	30Min to 10Hrs. at full load.	
Type of Batteries	Pasted / Tubular	
Recharging time	Minimum 10 Hrs.	
Charger	Boost (Optional) & Trickle charger	
Indications	a)Mains High (b)Mains On (c)Phase fail (d)Charger on (e)Battery low (f)Battery High (g)Over load (h)Load on mains (i)Load on Inverter.	
Protections	Over Voltage / Under Voltage, Overload, Battery Over Voltage / Under Voltage, Short Circuit.	

Specifications Of Parts

The following is a list of parts used in Lift Battery Backup System along with the make.

IGBT		Mitsubishi / Semikron / Epcos	
IGBT Capacitors	:	Alcon	
DC Capacitors	-:	Alcon	
MCB		Protek / MDS	
Contactor	: //-	Siemens / L&T	
IC's		Motorola / Thermax / Mitsubishi or equivalent.	
Cabinet		Sheet Metal with Powder Coating.	



Difference Between Diesel Generator & Emergency Lift Operating System.

	Lift Battery Backup System	Diesel Generator
CAPITAL COST	Cheaper than Diesel Generator	Costlier that Lift Battery Backup System
EXTRA COST	Besides Wiring, Changeover Switches & Contactors no other cost.	Requires Wiring & Changeover Switches along with A.M.F. panel, canopy, exhaust & room.
RUNNING COST	Very low as actual power is utilized from the batteries only when LOAD is operating.	Very high as Generator has to be kept working even if LOAD is operating or not operating.
LIFE	The only thing that needs to be replaced are the batteries after 4 to 6 years. System life might differ anything from 15 to 20 years or more.	If maintained life range is about 15 to 20 years. But has routine expenses like FILTER & OIL REPLACEMENT.
POLLUTION	No Noise or Smoke pollution.	Smoke pollution. Noise can be cut down by use of Canopy.
LEGALITIES	Does not require Government permissions.	Requires permissions from S.E.B., POLLUTION BOARD & P.W.D.
SPACE	Very less space required. Can even fit below the staircase.	Requires at least 100 Sq. Ft.
OPERATION	Fully Automatic. No manual help required.	Changeover can be Automatic by using AMF panel. But manual help required for filling diesel.



Some of our esteemed clients

Nashik

Janaki Constructions Rishiraj Developers **Sumangal Developers Deepak Builders Thakker Developers** Karda Constructions Siddhi Builders & Developers **United Builders** Mittal Developers **Gayatri Constructions** Renuka Buildcon **Vimal Constructions** Anand Bhakti Sankul (AMC) Anand Mall (AMC) Sanklecha Garden Estate (AMC) Rahul Estate

Pune

Amrut Runwal Group **Angal Builders** Anutej Associates Bal Developers Behere Babar Bhangadiya **Behere Builders** Bhagwan Palav & Sons D.Y. Gokhale **Bhansali** Associates **Deshpande Dixit Associates Dreams Builders Espee Builders Gaikwad Gore Associates** K.Raheja Corporation **Kumar Builders** Tanaya Developers Nirmitee Developers P.B.Constuctions **Pandit Javdekar Associates** Paranjape Schemes Parmar Group Prasun Builders **Prestige Builders Polekar Harhare Associates Ramsukh Properties Rainbow Developers** Rajeev Khinwsara Raviraj Bokadia Associates Raviraj Dighe Associates Riswadkar Associates **Runwal Builders** S K Builder Suarana Bothra Associates **Swojas Associates** Tambe & Tambe Developers United Builders **Vascon Builders** Yash Developers **Yugal Construction**

Mumbai

Lodha Group Kabra Group **Dynamic Associates** Damji Shamji & Co. **Vikas Corporation Mahadev Constructions Paradise Builders Creative Enterprises** E.V. Homes **Proviso Builders Army Welfare Society** Sagar Darshan CHS **Sun City Builders Duratech Builders** Sanghoi Brothers **Neminath Construction** Kalsha Builders Rajesh Builders Vardhaman Complex, Mulund Sarovar Darshan, Thane **Janhavi Constructions**





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Office: B-49, Tulshibaugwale Colony, Sahakarnagar No. 2, Pune 411 009.

www.orionsystemsups.com

Pune:

Tel: +91 20 24225586 / 30481409,

Fax - 30420498

E-mail: pune@orionsystemsups.com,

Nashik:

Tel: +91 9011013244

E-mail: nashik@orionsystemsups.com,

Mumbai:

Tel: +91 9324647972

E-mail: amit@orionsystemsups.com,