Welcome to India’s largest selling, fastest growing & complete lithium battery solution company
GROUP PROFILE

Okaya is a flagship company of Okaya Power Group, a multi-billion conglomerate and a symbol of trust for over 28 years.

Established in 1980, Okaya Power Group has a dominating presence in tubular inverter batteries, SMF / VRLA, automotive, solar batteries, e-rickshaw batteries, healthcare products (RO Water Purifiers), software development and real estate. Latest addition in the bouquet is Lithium battery.

Year 2002 saw emergence of Okaya as India’s Leading battery manufacturing company. With a widespread product range and applications it has become a symbol of trust.

Supported with one of the largest channel network and service set-up all across the country has 9 state of art manufacturing units, 2 central warehouses, 31 regional warehouses and branch offices spread across 29 states.

Time and tide has helped Okaya achieved global presence and a respectable position in domestic market. It imbibes integrity, innovation, trust and customer relationship as core values.

Okaya batteries are manufactured in an Eco-friendly, ISO 9001:2015 and 14001:2015 Certified automated plants, capable of facilitate recycling processes and thereby minimizing wastage.
OKAYA GROUP COMPANIES AND BRANDS
VISION
World class mobility and living thru stationary power, portable power, healthy water and air to billions of people on this planet earth.

MISSION
To create everlasting, ever growing organization enhancing the quality of life of billions of people throughout the world.

OKAYA LITHIUM STRENGTH & CAPABILITY

- Agile Service
- Sufficient Capacity
- BMS / PCM Capabilities
- Intelligent Manufacturing
- Customization
- Strong R&D Capability
- Design Capability
- Full Supply Chain Layout
MANUFACTURING AND RESEARCH & DEVELOPMENT UNITS

With insistence on high standards of ethics, teamwork & commitment to quality and innovation

Complete lithium power battery R&D and production system

Process Development

Cell R&D Evolution & Testing

BMS R&D Manufacture

Module R&D Manufacture

Pack R&D Manufacture

Repurpose Recycle
R&D FACILITIES

- Well established Research & Development unit at New Delhi
- Backed by highly focused Research & Development oriented Okaya Power Group
- Striving to achieve world class standards in its all product categories
- R&D Team consists of well qualified engineers from mechanical, chemical and electrical engineering stream supported by best qualified chemists, product, component, tool designers, and data analysts
- R&D works in sync with production, quality, service, sales & marketing teams
- Regularly seeking consulting from experts in the field
- Apart from new product development, initiatives taken in performance, aesthetics, ease of use and lifecycle of existing products
- Labs are equipped with latest sophisticated equipment Okaya Lithium has ability to turnaround samples for evaluation in 72 hours in most of the cases and 2 to 4 weeks for all other solution.
LITHIUM BATTERY MANAGEMENT ADVANTAGE

Multi Level Protections
The in house developed battery management system (BMS) protect battery from over charge, over discharge, over loading, short-circuit, over temperature, under temperature etc. Three level current protection make battery absolutely safe against misuses and accident.

Cell Equilization
Passive charge equalization up to 500ma will keep all cells in the battery at same soc condition helping the battery to perform its full capacity.

Active Equilization
High current active charge equalization uses two way charge transfer technique. The high charge cell transfer extra charge to the lowest charge cell. This helps in Battery to increase its life up to 25%. This equalization is highly effective in high current application like EV, ESS etc.

Wireless communication
Active BMS can interact with other devices / equipment through various serial, BLE/CAN/CAM protocols. The complete battery health can be monitor and historical data can be viewed online.

Low Power Management
The BMS are design with very low power consumption in the storage mode. The idle power consumption is less than 5 miliwatt. This provides shelf life of battery more than one year. During operation also the losses are less than 0.5% providing higher backup and efficiency.

Thermal Management
The intelligent thermal management monitors the temperature of cells and active devices inside batteries and protect against over and under temperature conditions. This thermal management enhance safety and life of batteries.
IN HOUSE BMS CUSTOMISATION AND MANUFACTURING.

SALIENT FEATURES

- Monitoring
- Computation of charge current limit, discharge current limit, total no. of cycles, energy etc.
- Multi level Protection
- SOC / SOM Optimization
Three Research Centres provide strong R&D support for product development in different categories.

Battery Management System
Pack Manufacture Technology
Performance Enhancement of Lithium Battery
**SALIENT FEATURES**

- Ideal for Solar Home Lighting System
- 100% Efficient for Charge / Discharge
- Eco Friendly
- Quick Charge
- Low weight (1/7th of lead acid battery)
- Mechanical Locking Arrangement
- Longer life
- Cuttoff - Overcharge & Discharge

- High Temperature performance
- Plug & Play Battery
- IP 65 Complaint
- Revere Polarity
- Shock Absorption
- Short Circuit Protection
OKAYA LITHIUM BATTERIES – WIDE RANGE OF APPLICATIONS

01 POWER BACKUP
02 ELECTRIC VEHICLES
03 SOLAR
04 TELECOM
05 PROJECTS
POWER BACKUP – ESS (ENERGY STORAGE SYSTEMS)

Okaya Lithium ESS supports range of applications – Home use Inverter Battery application with built in Lithium Battery (wall mounted), Solar ESS Inverters combo, UPS with Lithium batteries, and used for both renewable and conventional source of energy

- Efficient
- Long life
- Remote monitoring
- Higher number of cycles
- Fast charging and discharging
- Accurate SOH (State of Health) measurement
- Data login back up for better management upto one year with efficient BMS
02 ELECTRIC VEHICLES (EV)

Okaya Lithium batteries supports range of vehicular and motorised applications – Buses, Electric cars, E-Cycles, E-Bikes, Golf carts, Fork Lifts, Trucks

- Batteries are designed with high cycle life >3000 cycles
- In house capability of designing robust BMS
- Long life, fast charging and discharging feature
- GPS feature (optional)
- Light weight yet highly efficient
- Easy replacement
- More mileage
03   SOLAR

Complete range catering to varied solar applications – Street light system, High mast, Emergency lights, Solar batteries with MPPT Charger

• Compact size
• Customisation facility
• Built in MPPT Charge controller and BMS
• High efficiency
• Long life
Okaya Lithium Batteries have wide spread applications in Railways (Traction and Signalling), Defence, ESS for Petrol Pumps, Industrial application, Schools, small & medium business enterprise, Containerised solution of MWH Scale ESS.

04  TELECOM

Telecom sector being one of the important infrastructure category, Okaya lithium batteries cater to telecom sector complete demand and solutions for power back up requirement.

- Reduced cost of DG & AC power
- Adaptable to customisation
- Low maintenance
- Low monitoring challenges
- Easy replacement - Hot Plug in

05  PROJECTS

Okaya Lithium Batteries have wide spread applications in Railways (Traction and Signalling), Defence, ESS for Petrol Pumps, Industrial application, Schools, small & medium business enterprise, Containerised solution of MWH Scale ESS.
- Match dispatching instruction, realize the planned power generation or energy storage;
- Real time power output smoothing;
- Transient active power emergency response;
- System monitoring and data acquisition;
- Database maintenance, fault alarm, communication and display function;
- Data real-time storage, transmission;
- Active and reactive power control functions.

**Modular design**
- 3S 4P cells per module
- 3S 1P module per drawer
- 28.8V, 8.64kWh per drawer
- 172.8V, 51.86kWh per cabinet
- 518V, 156kWh (125kWh@0.8DoD) per cabinet
- Fan cooling
- BMU built-in
- V, C sensor built-in
- Heating plate built-in
- Back connection
- RS485/CAN/IP
- SOC, SOH visible
- Maximum 3C discharge
OKAYA LITHIUM ENERGY STORAGE SYSTEM

ESS in Telecom
- Own R & D to provide a stable 48V battery pack for customers.
- Creatively develop of emergency power bank, mobile power cars and other unique solution for fast mobile internet development.

Household ESS
- Ten years of accumulated technology.
- Cooperation with industry well-known system manufacture
- Modular design, handiness, long service life
- Off-grid, green, save and reliable.

Micro Grid
- ESS jointly launched modular intelligent micro-grid energy storage system with MWH level which is cost-effective, to make contribution to low-carbon life for community.
Product features

- With computer monitoring software, remote real-time collection of battery data through port, CAN MODBUS RS48S
- A variety of protection functions, effectively ensure the battery performance;
- Long cycle life, battery pack life is over 3500 times, 80%DOD:
- Small internal resistance, superior discharging performance;
- Maintenance free, wide range of service temperature, reliable;
- Instead of lead acid battery to supply power to base station equipment, green;
- Single set series: 48V/50Ah  75Ah; parallel set series: 48v/100Ah.
OKAYA LITHIUM CYLINDRICAL LIFEP04 SERIES

Key Feature:
- Automatic production equipments
- Standard cylindrical steel shell structure, with breakpoint and explosion-proof equipment
- Low internal resistance, high discharge rate, stable discharge platform
- Can be designed and customized
- The capacity is over 80% after 1000 charge / discharge cycle

OKAYA LITHIUM PRISMATIC LIFEP04 SERIES

Key Feature:
- Highly automated production equipment, High consistency.
- Prismatic aluminum shell structure and combination of cover plate with anti-explosion-proof value
- Low internal resistance, high discharge rate, stable discharge platform
- Long life capacity greater than 80% after 3500 charge / discharge cycles
Energy Storage System
Household Off-grid Energy Storage System can be charged both by solar power and AC power. Output power is 1KW to 2KW; It's suitable for no power or unstable power supply area. The system integrates with solar charge controller, system controller, inverter, Lithium Battery and BMS

Product features
- Solar controller has MPPT function; conversion efficiency can reach up to 98%;
- Pure sine wave output, low noise, high conversion efficiency, strong load ability;
- Personalized human interface display, the user could see all kinds of running state by LCD display which also could be set up by buttons;
- Smart Li-ion battery management system, with exclusive active balance technique, high accuracy of voltage correction, it ensure the consistency of the cells;
- Humanized alarm function and complete online protection function which could ensure the system is under safe operation;
- Both solar energy and electricity could provide power which highly guarantee the power supply; power generation mode could be set, based on solar energy and electricity
On-grid LiFePO4 Battery Energy Storage System is all-in-one machine with good looking appearance and excellent performance. It is with all-in-one design to integrate the control system, inverter system, cable concentrator and battery which is easy for installation and use.

**Product feature**
- Smart energy management system with real-time monitoring function;
- With the best battery LiFePO4 module and advanced BMS;
- The system operation status can be monitored on cell phone APP;
- With ESS which makes the best use of self power generation, to save the electricity free, it also can be backup power for emergency;
- Multifunctional inverter, integrated with PV, MPPT, charger, DC/AC converter, supports on/off grid operation way.
DOMESTIC NETWORK

110,000,000 Satisfied Customers
1,500 Employees
2,420 Distributors
38,624 Dealers
40 Branches
40 Regional Ware Houses
592 Sales & Service Team
2 Central Ware Houses
OPG Exports to over 21 Countries.